

JUNE 1956

# *The School Executive*



Let's Take a Look at New Schools—p. 61



Any way you look at it Formica surfaces are easy on the eyes. The many pastel and light wood Formica colors are not only beautiful, but reflect light to the proper degree to prevent glare.

But Formica on tables, desks, window seats, walls, home economics kitchens and other heavy traffic areas is best justified by cold arithmetic. Because super smooth Formica resists scratching under hard daily use, it never requires painting or refinishing — its first cost is the last cost. Easy, damp cloth cleaning of Formica means real savings in yearly maintenance.

There are many expert Formica fabricators the country over. Many school systems use their own woodworking shops to resurface existing worn furniture.

A Formica representative will gladly explain how you can best apply Formica to meet your needs. Call your local Formica office or write

**FORMICA CORPORATION**  
Subsidiary American Cyanamid

4576 Spring Grove Ave.,  
Cincinnati 32, Ohio

Customers buy Formica because it is a brand name they know and trust.

**DEMAND THIS CERTIFICATION**

We protect this faith in our product by certifying every sheet with a wash-off Formica marking. It is for your protection and guarantee that you are getting genuine Beauty Bonded Formica.

*This mark certifies genuine*

WASH OFF WITH LOTS OF BAR SOAP ON A DAMP CLOTH

Guaranteed by  
Good Housekeeping  
and an approved method



Seeing is believing. If this wash-off identification is not on the surface, it's not FORMICA.

# The School Executive

JUNE 1956

VOLUME 75 NUMBER 10

CONTENTS

- EDITORIALS**
- 5 Preview of July
  - 7 The Role of the Educational Consultant, by Walter D. Cocking
  - 9 Keynotes—Comments on the Educational Scene

- GREEN SHEET**
- 19 Selecting Equipment for New Schools, by N. L. Englehardt, Jr.
  - 21 School Building Costs and Bond Prices, by Harold F. Clark

- SCHOOLS IN ACTION**
- 41 The Problem of Pupil Retention, by Ralph E. Billett
  - 44 How About Merit *Praise?*, by Lee D. Fridell
  - 46 4-Point Program for Dental Health, by Ruth Bugbee Starns
  - 49 The High School Diploma—Symbol of What? by John D. Andes
  - 50 They Criticize When They Don't Know, by William H. Pollard
  - 52 Counsel for Consultants, by Woodson W. Fishback
  - 56 Pointers for the Principal, by Harmon V. Wade

- SCHOOL PLANT**
- 11 School Plant News and Views
  - 54 Consider Lockers When You Plan, by Frank E. Hewens
  - 58 We Bet on a Ring Theater, by James E. Garland
  - 60 Creativity in School Planning, by Donald L. Essex

- PLANNING SECTION**
- 61 Let's Take a Look at New Schools, by Matthew J. Pillard and Kenneth Gibbons

- NEWS**
- 92 Spotlight—News of the Education Field
  - 130 Washington Scene

- LUNCH**
- 136 Type A Lunch in a Paper Bag, by Ruth Walker

- DEPARTMENTS**
- |                          |                             |
|--------------------------|-----------------------------|
| 13 Pamphlets of Interest | 166 New Films               |
| 15 Conference Calendar   | 168 Manufacturers' Catalogs |
| 134 Professional Library | 170 New Textbooks           |
| 143 New Product News     |                             |

- COVER** Kenmore, Washington, Elementary School, designed by Ralph H. Burkhard (see page 91).  
Photo by Chas. Pearson.

---

WALTER D. COCKING, *Editor*

*Editorial Staff:*

N. L. ENGELHARDT, *Consulting Editor*  
L. Karen Beach, *Associate Editor*  
Dolores M. Sloan, *Assistant Editor*  
Grace F. Strub, *Assistant Editor*  
Belmont Farley, *Washington Correspondent*

MATTHEW J. PILLARD, *Managing Editor*

Harold F. Clark, *Consultant*  
Henry E. Sulloch, *Art Director*  
Helen E. Weyl, *Production Manager*  
G. W. Harris, *Director of Circulation*

---

One-12 Desk Top Size 18" x 30"



*the sincerest form of flattery!*

Airplane Table Available with tops 21" x 42", 21" x 48", 24" x 48"



At American Desk, we *expect* to be imitated. And we're proud of it! That means that we've designed the kind of school furniture that's wanted . . . and *preferred* over all others in the industry!

Yes, American Desk is glad to set the pace others follow.



Two examples of years-ahead design and expert craftsmanship are the One-12 and Airplane Desks. Sturdily constructed . . . handsome in appearance . . . here are two of America's most versatile, most manageable units.

*american desk*

MANUFACTURING CO.

TEMPLE, TEXAS

For Competent Assistance, Complete Details, Ask Your State AD Representative.

## The School Executive

### Editorial and Executive Offices

470 Fourth Avenue, New York 16, N. Y.

Edgar J. Buttenheim  
Chairman, Board of Directors

Prentice C. Ford  
President

Edwin Wagner  
Secretary and Treasurer

Frank H. Laavy  
Advertising Manager

### Branch Offices

Chicago 6, Illinois—Daily News-Bldg.

Frank J. Raymond  
Vice-President

John A. Raymond  
Western Advertising Manager

Cleveland 14, Ohio—602 The Arcade  
Frank E. Smith

Los Angeles 27, California—2238 Ben  
Lomond Drive  
Albert T. Miller  
Pacific Coast Manager

Lookout Mountain, Tenn.—121 N.  
Hermitage  
Curtis R. Buttenheim  
Southern Sales Manager

### Editorial Advisory Board

Terms Expire December 31, 1956:

E. Allen Bateman  
State Superintendent of Public Instruction,  
Salt Lake City, Utah

Walter K. Beggs  
Professor of Education, University of  
Nebraska, Lincoln, Nebraska

Daniel R. Davies  
Professor of Education, Teachers College,  
Columbia University

L. G. Derthick  
Superintendent of Schools, Chattanooga,  
Tennessee

Edward J. Russell  
Superintendent of Schools, Pittsfield,  
Massachusetts

Terms Expire December 31, 1957:

Harley W. Anderson  
Secretary-Treasurer emeritus, Association  
of School Business Officials, Kalamazoo,  
Michigan

W. W. Caudill  
Architect, Caudill, Rowlett, Scott and  
Associates, Bryan, Texas

Ira Jarrell  
Superintendent of Schools, Atlanta,  
Georgia

Bruce Miller  
Superintendent of Schools, Riverside,  
California

Pearl Wanamaker  
State Superintendent of Public Instruction,  
Olympia, Washington

Terms Expire December 31, 1958:

John H. Fischer  
Superintendent of Schools  
Baltimore, Maryland

## Preview of July

The July issue of *The School Executive* will present a comprehensive discussion of a new topic: closed-circuit television and its use in schools. An experienced group of engineers and educators have prepared the materials. All readers should examine these articles carefully.

The Green Sheet will present Clint Pace's beliefs on maintaining and strengthening public interest in our schools. Mr. Pace, you will remember, was executive director of the committee for the White House Conference on Education.

You will also find articles on a Schenectady program for competent children, a new approach to merit pay, how to lick the engineer-scientist shortage, a Washington school's "investment in better living," the role of the school newspaper, and study of accidents in a school system.

Suggestion: Find a comfortable place under your favorite tree and enjoy this issue.

Sincerely,

Walter D. Cocking, editor

Paul A. Miller  
Superintendent of Schools  
Syracuse, New York

Irvin P. Murphy  
Director of Secondary Education, State  
Dept. of Education, Santa Fe, New  
Mexico

William O. Penrose  
Dean, School of Education  
University of Delaware, Newark

Archibald B. Shaw  
Superintendent of Schools  
Scarsdale, New York

Terms Expire December 31, 1959:

Russell T. Gregg  
Professor of Education, University of  
Wisconsin, Madison

L. D. Haskew  
Vice President and Dean, College of  
Education, University of Texas, Austin

Edgar L. Morphet  
Professor of Education, University  
of California, Berkeley

Truman M. Pierce  
Dean, College of Education, Alabama  
Polytechnic Institute, Auburn

G. E. Rast  
Superintendent of Schools  
Westport, Connecticut

Terms Expire December 31, 1960:

William E. Bishop  
Superintendent of Schools  
Englewood, Colorado

Harold B. Gores  
Superintendent of Schools  
Newton, Massachusetts

Van Miller  
Professor of Education  
University of Illinois, Urbana

L. H. Shepotser  
Superintendent of Schools  
Mason City, Iowa

Earl W. Wiltse  
Superintendent of Schools  
Grand Island, Nebraska

THE SCHOOL EXECUTIVE is published monthly at Orange, Conn., by the American School Publishing Corporation. Edgar J. Buttenheim Chairman of the Board, Prentice C. Ford, President; Frank Raymond, Vice-President; Edwin Wagner, Secretary and Treasurer. Entered as second-class matter at the Post Office at Orange, Connecticut, under the act of March 3, 1879. Subscription rates: United States and Canada—1 year, \$4.00; 2 years, \$7.00; 50¢ per copy; back or reference issues \$1.00 per copy. Other Foreign Countries—\$7.00 a year. Member of "Audit Bureau of Circulations" and Educational Press Association. Microfilms, University of Michigan, 313 N. First Street, Ann Arbor, Michigan. Copyright, 1956, by American School Publishing Corporation, 470 Fourth Avenue, New York 16, New York.

*Save the coat, Walt...*

**I've got**

**FORT HOWARD**

**PAPER TOWELS!**



No need to furl the farthingale . . . not when Fort Howard Paper Towels absorb so much moisture so quickly — yet stay strong and firm when wet! What's more, Fort Howard's Acid-Free Paper means kinder, gentler drying, too!

Call your Fort Howard distributor . . . and let him recommend *the* towel service that fits *your* specific needs, from Fort Howard's 18 different grades and folds.



**FORT HOWARD PAPER COMPANY, Green Bay, Wisconsin**

*For 37 Years, Manufacturers Of Quality Towels,  
Toilet Tissue and Paper Napkins*



AS I SEE IT /

by Helen J. Becking

## The Role of the Educational Consultant

A NEW PROFESSION has evolved in the last decade whose members call themselves educational consultants. As yet their services have not been clearly defined, nor is there an accepted scope of activities; neither do there seem to be any particular competencies or qualifications which consultants must have. Apparently all that is necessary to become an educational consultant is to so announce. The result is confusion, misunderstanding and a varied quality of service being rendered. Possibly, these are the growing pains that attach to any vocation involving professional skills and "know how."

There seems to be an increasing demand all over the country for the services of educational consultants on a vast variety of problems. School boards, superintendents of schools, state departments of education, colleges, architects, manufacturers, tax groups and citizen groups are among those who seek and use the services of educational consultants.

Who are these educational consultants and what is their background? By and large, most of them have had educational preparation and considerable experience in the school field. Many educational consultants have reached the compulsory retirement age in their regular jobs; as they yet have physical and intellectual vigor, they make this service available and accordingly are able to continue to earn. Many of the most useful consultants are in this group. Some go into consultative work from their regular jobs in education because they feel it is more intriguing and valuable.

SOME EDUCATIONAL consultants do consultative work in addition to their regular jobs. Again, in the case of some college professors and members of state departments of education, consultative work is considered a regular part of their job. More recently some younger men have selected consultative work as a full-time career, and hence prepare themselves accordingly.

The tasks performed by these consultants vary widely. The more conventional is the making of surveys on one or more phases of the school system's work—surveys involving the gathering and analyses of pertinent information followed by proposed recommendations. More recently the trend is for the consultant to aid in planning

the studies with the actual collecting and analyzing of data done locally. The consultant then aids in the interpretation and helps formulate the proposals.

The most common form of consultative service at present is connected with the school plant. The urgent need in a majority of our school districts for additional plant facilities, at the earliest possible moment and at a cost which is within their financial ability, has caused school officials to seek professional counsel. However, as school plant needs are in themselves dependent upon the school population, organization and program, the practice has developed to use consultative services on all phases of the school system. Undoubtedly, most consultative service is used in connection with studies of the educational program.

THE USE OF consultants has brought to the schools an increasing amount of assistance not previously available. It has also stimulated local school systems and communities to increase their efforts to study and resolve the issues and problems which confront them. Such results are beneficial.

As I see it, consultative service from the outside pays dividends and should be encouraged. What is needed is an intensive appraisal of the type and quality of such services. The results of such appraisals deserve most careful study and deliberation. One aim should be to determine the kinds of services which should be sought and rendered. The qualifications which consultants should possess need to be examined; plans should be developed to protect schools and consultants against the incompetent. Ways of selecting and procuring consultants should be weighed. Possible methods of determining proper remuneration for such service should be studied. Length and character of service needs examination. Procedures for appraising the worth of consultative services need to be formulated.

School administrators are vitally concerned with these problems. It is to be hoped that they will devote increasing attention to all phases of the problem. The AASA and state associations of school administrators might well make the work of consultants a matter for major study and discussion. We need to go into action immediately.



## How to carry more passengers (60! Count 'em) with more safety!

**CHEVROLET**

You're looking at 60 pupils, all right. That's how many ride comfortably in Chevrolet's big new 240-inch wheelbase school bus models. And those pupils ride with extra safety; you can count on that.

The extra-rugged design of these chassis models is a big safety *plus*. Frames are heavier, suspensions huskier, brakes bigger . . . right down to stronger wheel mountings, you're sure of brawny, built-to-take-it construction. Yes,

and there's extra safety in Chevrolet performance. Short-stroke V8's, standard in both 60-pupil models, supply lively, dependable power—with lots of zip when you need it.

Call your Chevrolet dealer for details and specifications. He'll be glad to assist you. You'll find that all of his chassis models meet or exceed the most recent National Minimum School Bus Standards. . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

### Name your capacity . . . Chevrolet's got it



10802—240-inch wheelbase,  
60-pupil capacity body.



8802—240-inch wheelbase,  
60-pupil capacity body.



6802—220-inch wheelbase,  
48- to 54-pupil capacity body.



6702—194-inch wheelbase,  
42- to 48-pupil capacity body.



4502—154-inch wheelbase,  
30- to 36-pupil capacity body.



DOUBLE-DUTY CARRYALL  
—standard 8-pass. truck model.

## New Chevrolet School Bus Chassis

# KEYNOTES /

comments on the educational scene

## Safe and conservative

PRESIDENT EISENHOWER's Committee on the White House Conference on Education has completed its work by placing on the President's desk a carefully-prepared report of its findings and recommendations. Probably the report was the least important part of the Committee's work. Certainly the planning, promotion and conducting of the White House Conference last fall was a monumental task which was performed superbly. The thousands of local, regional and state conferences on education which the Committee stimulated throughout 1955 were real accomplishments which are having far-reaching results.

The report itself was a good one as such things go. It contained a great deal of information. It had its strong and constructive points. The Committee straddled some issues. It failed to come to grips with others. On the whole it could be characterized as safe and conservative. It did not call for any very radical departure from the already accepted pattern. Most people concerned with education will be able to find in the report more with which they can agree than disagree.

What happens now? Will the report remain on file soon to be forgotten? Or will it become the basis for constructive and intelligent action? Friends of education certainly hope it will be the forerunner of action on all levels of American life.

## An inspiring message

THE SCHOOL EXECUTIVE expects bulletins from his state school building divisions, covering new building legislation or revised administrative procedures, suggestions on space allotments and statistical tables, or charts of costs and the like. These publications are of definite value in his work.

Director Don L. Essex of New York State's School Building Division has recently tried his hand at another type of message. A complete copy of his letter is on page 60. He analyses the direction school planning might well take, presents admonitions that merit heeding, and gives inspiration and guidance. He encourages those striving for a better educational environment for future generations.

## More moral backbone

SOMEONE ONCE WROTE that it was alright to go to church and daydream. In fact, he pointed out that probably the real contribution of a homily was not its surface contents, but what tangential train of thoughts it set in motion in the hearer.

Something like this happened to me recently at an important conference. One group of educators thought that more good research, on the problems of

teaching and learning, would do a great deal to help education achieve a truly professional status with all consequent monetary and other rewards.

I agree enthusiastically with this view—up to a point. But it seems to me that a more important factor was neglected, and that is morality. The basic problems of teaching, learning and administration are still *moral* problems—and probably always will be. Our problems must be solved, or at least attacked, in terms of moral values, rather than in terms of research findings *per se*. What our profession needs even more than more reliable and valid knowledge is more backbone.

This is not to say, of course, that we are moral weaklings, but merely that working with people successfully requires a firm grasp of moral principles and their applicability to concrete situations.

WILLIAM O. PENROSE  
Dean  
School of Education  
University of Delaware

## Teachers' salaries

THE DOLLAR INCREASE in teachers' salaries throughout the country is encouraging. Certainly the amount of money teachers receive is considerably greater than it was ten years ago. However, when the value of the dollar, or what that dollar buys, is compared with what it bought ten years ago, it is apparent that the real increase in teachers' pay has been small and inconsequential. In a majority of school districts, the increase in number of dollars for teachers' salaries has only slightly exceeded the increase in the cost of living. The result is that their standard of living has not changed much.

The problem then remains to increase teachers' pay in terms of purchasing power. As judged by comparative salaries and wages in other vocations, teachers continue to occupy a lowly position. Communities which believe that teachers' services should be recognized as occupying a more important place in the scale of value have a big job to do.

## One day's gleanings

IT WAS A REWARDING experience to read the morning newspaper one day recently, in terms of the amount of space covering news of education. From this harvest, we gleaned three quotations for our bulletin board:

- Every school system should have its free junior college—President Eisenhower
- Reading is every teacher's business—Superintendent William Jansen, New York
- Learn because, unless you do, you will be in a bad way. Where there is no education there is hunger, disease and misery—Mayor Robert F. Wagner, New York

# The **SEAT-EAT** Convertable

Table to Bench—Bench to Table



## FOR CAFETERIA SERVICE

### Seat-Eat Converts to Table

Dining space for ten people at mealtime, using five chairs on each side. Blonde wood grain plastic top resists scuffing, heat and food acids.

**TEN  
EATING**

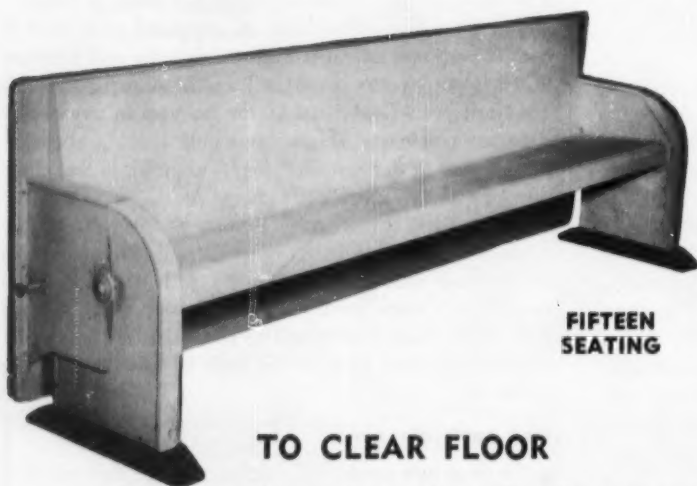


Table available in 30" x 96" and 30" x 72".  
Heights from 27" to 30".



### CONVERTING

Seat-Eat becomes a bench with a flick of the magic lever. Easily converted by students.



## FOR GROUP ACTIVITIES

### Seat-Eat Converts to Bench

Restful, form-fitting seating for five additional people at group functions. Simply turn one row of chairs to face speaker and the transformation is completed in seconds.

**FIFTEEN  
SEATING**



### TO CLEAR FLOOR

Remove chairs and swing Seat-Eat in bench form with back to wall, producing seating around the active area.

Seat-Eat can be supplied with casters with stationary position locks.

Patent Applied For

Write for brochure with complete specifications.

**SEAT-EAT, INCORPORATED**

1166 West Peachtree Street • Atlanta, Georgia

## Building for People

The familiar term "not subjects but people" holds as true for school designing as for teaching. Designs of the better educational facilities consistently illustrate this growing concern on the part of educators and architects to build their new schools for people. (This was particularly evident in the winning entries of this magazine's Competition for better School Design, reported in the May issue, page 45.)

Traces of the "old school" are still evident, but increasingly, spaces and facilities which reveal warmth and informality (the commons, the mall, benches, lounges, spaces for small groups) are being provided where a person may be alone occasionally or participate in small-group learning activities.

Evidence supports the view that more careful attention is being given to site development—preserving Nature's trees, trails and slopes instead of destroying them.

These and other aspects of the Competition and recent school designs reflect the effort to shape buildings for people. Stated another way, there appears to be a growing concern for human values.

Walter F. Bogner, F.A.I.A., professor of architecture at Harvard University, was asked what human values in school architecture mean. His reply was:

"Human values in architecture prevent a school from being a machine for education. They are derived from the artistic qualities of the architect's design that create an appeal through emotional reactions—beyond mere satisfaction through physical comfort and efficient performance—and lead to the enjoyment of the school by its pupils, teachers and the community. Human qualities in school architecture are necessary to combat institutional traits and to counteract the dulling monotony of standardization and mechanically controlled conditions that this age

## New Narbonne High School Encircles Education



New Narbonne High School in Los Angeles achieves continuity welcome in a large school plant with a spiral design patterned like spokes in a wheel. An open court at the center of the spiral serves as a central hall, providing students with easy access to all buildings. Planned by architects Daniel, Mann, Johnson and Mendenhall, at a cost of \$4,250,000, the plant accommodates 2000 students on a 40-acre site.

thrusts upon us, in or out of school."

## Teachers, too, need rest

Family lounges in the new Senior High School, Garden City, New York, have been attractively furnished and decorated. Designed specifically for teachers' off-duty rest and relaxation hours, the soft colors and decorative draperies, generously scaled easy chairs and sofas, contribute to the desired "climate" and basic purpose of the room.

## Film features concrete control

*The Man With the Trowel*, an informational motion picture dealing with quality control in concrete production, has been released recently by The Master Builders Company. The film is in color and runs for 30

minutes. To secure the film for private showing to groups interested in problems related to concrete, requests should be addressed to: The Master Builders Company, Division of American Marietta Company, Cleveland 3, Ohio.

## Stock Plans?

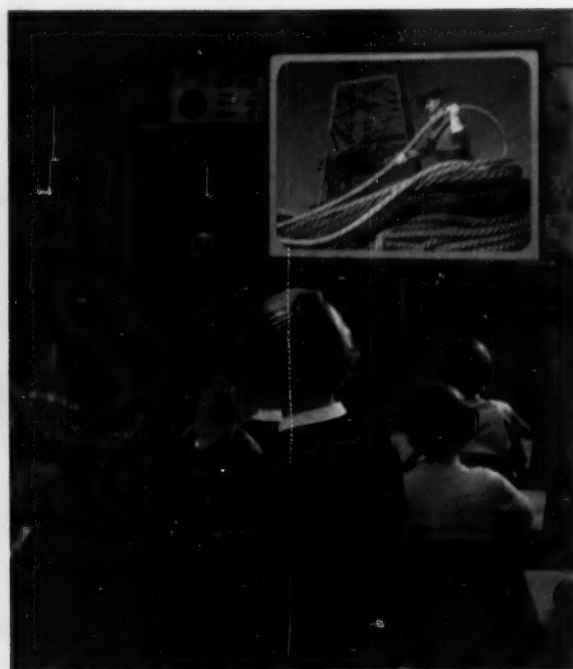
Schoolmen who have thought of using stock plans to meet the need for more and more classrooms will be interested in reading *Stock Plans for Schools—Substance or Shadow?* by Charles W. Bursch. Appearing in the Bulletin of the American Institute of Architects, November-December, 1955, the article poses significant questions for conscientious schoolmen and architects to answer when exploring ways to provide school spaces.

Give yourself this "screen test"

SE-208



☐ Check here



☐ Check here

## Which of these movie showings commands more viewer attention, message retention?

Many teaching and training films command more attention... get their message across more effectively... when audiences do NOT have to sit and watch in total darkness.

Often it is far better when room illumination is controlled—kept at what psychologists call a "comfortable level for group discussion." This is approximately one foot-candle: about the minimum light necessary to read type the size of that in the preceding paragraph.

**BUT**, stepping up room light during film showings means you need a projector that throws maximum light on the screen to maintain contrast between the screen image and the surrounding area.

**ONLY** the Kodascope Pageant Projector has the unique

Super-40 Shutter that puts 40% more light on the screen than standard shutters at sound speed... and still enables you to use the same projector for both sound and silent movies.

**And ONLY with a Pageant can you get all these:**

1. **Easy setups**—Projection is easy, even for the inexperienced, with the Pageant's folding reel arms and simple, printed threading guide.
2. **Freedom from worry** over breakdown or maintenance. Pageant's *permanent* lubrication ends breakdowns due to improper oiling—most frequent cause of projector difficulties.
3. **Clear, comfortable, natural sound**—Baffled speakers plus tone and volume controls team for unusual sound fidelity.
4. **Choice of three models**, to provide the proper sound and projection characteristics for your movie needs.

Don't guess about 16mm movie projectors! This free booklet shows you how and why a portable Pageant helps you get the most from your school and church movie presentations.



### EASTMAN KODAK COMPANY Dept. 8-V

Rochester 4, N. Y.

Please send me complete information on the new Kodascope PAGEANT 16mm Sound Projectors, and tell me who can give me a demonstration. I understand I am under no obligation.

NAME \_\_\_\_\_ TITLE \_\_\_\_\_

ORGANIZATION \_\_\_\_\_

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_  
(Zone)

Kodak

6-224

## Pamphlets of Interest

### Administration

*School Expense Compared with Combined City and School Expense, 1953 and 1954* is a study of 37 cities of over 100,000 in population. AASA and Educational Research Service, NEA.<sup>1</sup> Price: 50¢.

*School Salary-Schedule Provisions* is the September, 1955 study by the Research Division of NEA.<sup>1</sup>

*Enrollment, Teacher and Schoolhousing* is a study of Fall, 1955 figures in full-time public elementary and secondary day schools. Office of Education.<sup>2</sup> Price: 15¢.

*Background for a National Scholarship Policy*, compiled and edited by Elmer D. West, studies the problem, sources of funds, motivations relating to college attendance and scholarship administration. American Council on Education.<sup>3</sup>

*Selected References on School Finance* covers financial aspects of federal government, higher education, school buildings, school business administration, school personnel compensation, state aid, taxation, transportation and unit costs. Office of Education.<sup>2</sup> Price: 35¢.

### School Boards

*School Boards in North Carolina*, by Roland Reginald Morgan, studies their status, functions and activities. North Carolina School Boards Association, Chapel Hill.

### Teaching

*Selection and Training of Part-time Instructors* covers preparation of this type of teacher for working

<sup>1</sup>Pamphlets published by National Education Association departments may be obtained by writing to 1201 Sixteenth St., N. W., Washington 6, D. C.

<sup>2</sup>Office of Education publications are available through the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

<sup>3</sup>American Council on Education pamphlets are available from 1785 Massachusetts Ave., N. W., Washington 6, D. C.

**penco**—There's Economy in The **RIGHT** Equipment

SE-209

## EQUIPMENT THAT "WEARS OUT CALENDARS"



There's many an executive who is mighty glad today that he installed Penco "many calendars ago." And the executive who is looking today for steel shelving, cabinets and lockers with quality steel . . . durable rigid construction . . . flexibility of interchangeable standard parts and units . . . and the economy of extra space—equipment that will last for many, many years . . .

That executive should talk with a Penco dealer . . . the man who can give the finest equipment . . . and prompt service. For catalog, write Dept. SS.



**penco**  
**Steel Shelving**

puts efficiency at your workers' fingertips. Its variety of standard sizes and interchangeable units makes possible a flexibility of arrangement that will exactly meet your needs.



**penco**  
**Steel Cabinets**

the Quality line—offer a complete range of sizes . . . all with adjustable shelves . . . in storage, wardrobe, combination, counter-high, desk-high, and tool cabinets.



**penco**  
**Steel Lockers**

the Perma-Built Line—enable your dealer to offer you more than 60 types and sizes. You'll find a design that fits your space needs and gives satisfaction to your workers.

### Planning for Your Service—Swift Service for Your Plans

Penco specialists in storage equipment engineering are available—at no cost to you—to assist in planning an efficient, practical shelving installation to meet your needs.

As a division of Alan Wood Steel Co., steelmasters for 130 years—Penco is assured the full supply of high-quality steel which enables it to make prompt delivery on all orders.

**penco**

**DEALERSHIPS**  
**OPEN—Write**  
**for Details**

**STEEL LOCKERS**  
**CABINETS · SHELVING**

**penco METAL PRODUCTS DIVISION**

**ALAN WOOD STEEL COMPANY**

Oregon Ave. & Swanson St. • Philadelphia 48, Penna.

## Pamphlets

with adult groups in distributive education. Office of Education.<sup>1</sup> Price: 25¢.

*Teaching Opportunities in Milwaukee* is a booklet designed to encourage teachers to settle in this middle-western community. Superintendent's Office, Milwaukee Public Schools, 1111 N. 10th St., Milwaukee 1, Wis.

## Issues and Ideas

*Child Labor vs. Work Experience* is the annual report of the National Child Labor Committee for the year ending September 30, 1955, by General Secretary Gertrude Folks Zimand. National Child Labor Committee, 419 Fourth Avenue, New York 16.

*Public Education and Religion* is the report of the National Conference

held on this subject in St. Louis last November. It was sponsored by the National Council of the Churches of Christ in the USA. Office of Publication and Distribution, National Council of Churches, 120 E. 23 St., New York 10. Price: 30¢.

*Back to What Woodshed?*, by Judge Justine Wise Polier, is a profound and progressive analysis of juvenile delinquency and how to treat it. Public Affairs Pamphlet.<sup>2</sup> Price: 25¢.

*Education and Mental Health* is a report based upon the work of a European Conference called by UNESCO in Paris, November and December, 1952. Columbia University Press, 2960 Broadway, New York 27. Price: \$3.00.

## Guidance

*Two-Year Evaluation of the Internship in Guidance Program at Indiana University*, by Louis G. Schmidt, is published by the Division of Research and Field Services, Indiana University, Bloomington, Ind., Price: \$1.00.

*Consider Your Future* describes trades taught in Middlesex County, N. J., schools to give students "a good understanding of the requirements of each." Middlesex County Vocational and Technical High School, Easton Avenue, New Brunswick, N. J.

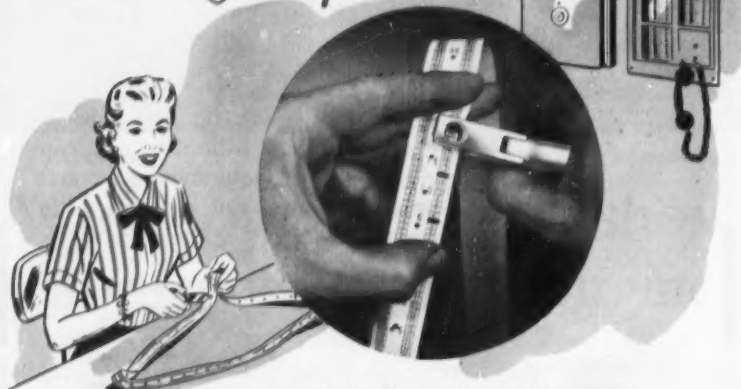
*Psychologists in Action*, by Elizabeth Ogg, is designed to introduce one to modern psychology, in classroom and in everyday life. Public Affairs Pamphlet.<sup>2</sup>

*Health Career Publications* is a fine collection of posters, leaflets and charts of value to the guidance teacher. National Health Council, Health Career Horizons, 1790 Broadway, New York 19.

<sup>1</sup>Office of Education publications are available through the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.  
<sup>2</sup>Public Affairs Pamphlets may be secured from Public Affairs Committee, 22 E. 38th St., New York City, for 25¢ each.

## EASY DOES IT with

# Memory Tape...



"First, I punch the Memory Tape at the time the signals are to sound . . . Then it takes only a few seconds to slip the Memory Tape on the drum. That's all there is to it!"

## THAT'S WHY SO MANY MORE USERS PREFER STANDARD PROGRAM CONTROLLERS

No parts to take out. No complicated mechanisms to get out of order. No confusing instructions to follow. Easy does it.

## RUGGED DEPENDABILITY

Functional simplicity — proved and improved for more than fifty years — assures uninterrupted performance with near zero service and maintenance.

\*Before you forget . . . get your copy of "Memory Tape Control" by Standard Electric.

Memory Tapes furnished free as required.

Write for information on School Clocks, Fire Alarm Systems, and Laboratory Panels.



**THE Standard**  
ELECTRIC TIME COMPANY

68 Logan Street • Springfield 2, Massachusetts



## CALIFONE PHONOGRAPHS

*At the head  
of their class...*

... from

**KINDERGARTEN  
to UNIVERSITY**

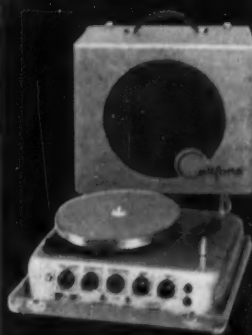
... from

**CLASSROOM  
to AUDITORIUM**

with Exclusive Features  
including:

- "QUARTET" 4-Speed Turntable
- VARIPOL Variable Speed
- PROFESSIONAL High Fidelity

FIFTEEN  
DIFFERENT  
MODELS  
TO MEET  
EVERY  
SCHOOL  
REQUIRE-  
MENT



172.50 School Net

illustrated...

**MODEL 12V-5**

Write for FREE Catalogue NS-3

**CALIFONE CORPORATION**

1041 North Sycamore Avenue  
Hollywood 38, California

## Conference Calendar

### JUNE

10-12, National Conference, Future Business Leaders of America, Department of United Business Education Association, NEA, Washington.

17-21, National Association of Student Councils, Toledo, Ohio.

26-29, Eleventh Annual Conference, National Commission on Teacher Education and Professional Standards, NEA, Parkland, Washington.

### JULY

1-6, National Conference, Department of United Business Education Associations, NEA, Portland, Oregon.

1-7, Ninety-fourth Annual Meeting, National Education Association, Portland, Oregon.

2, Joint Luncheon, National Council of Administrative Women in Education, National Association of Deans of Women, Portland, Oregon.

2-3, Annual Summer Conference of National Science Teachers Association, NEA, Oregon State College, Corvallis.

2-5, Twenty-first Annual Meeting, National School Public Relations Association, NEA, Portland, Oregon.

8-20, Thirteenth Classroom Teachers National Conference, Department of Classroom Teachers, Portland, Oregon.

9-14, Public Relations Seminar, National School Public Relations Association, NEA, San Francisco.

20-22, National Association of Educational Secretaries, NEA, Los Angeles.

### OCTOBER

7-11, Forty-second Annual Convention, Association of School Business Officials of the United States and Canada, Washington.

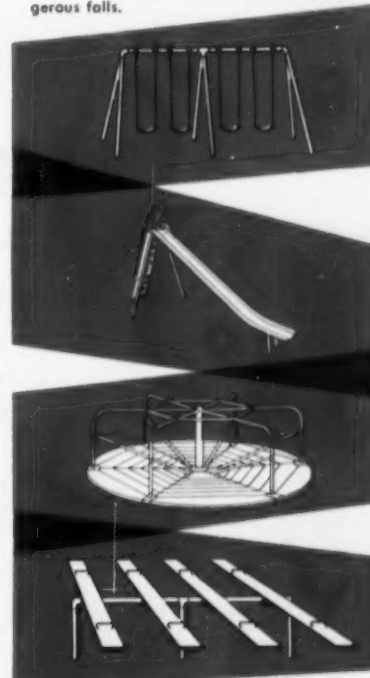
14-17, Eleventh National Conference, County and Rural Area Superintendents, Department of Rural Education, NEA, Atlanta.

## CONTROLLED SAFE PLAY

**RECREATION**

Protect the children that use your playground facilities with the rugged play-safe line of Recreation Equipment. Modern structural design, rust-resistant construction and competitive price are the major reasons to first consider the Recreation Line for your playground installation.

It's safe playtime when children use Recreation Swing Sets. Short-span frame maintains adequate swing separation, features oilless swing bearings. Flexible rubber seat belts hold youngsters secure, reducing dangerous falls.



Hot galvanized, structural steel supports and ladders, high guard rails and heavy-duty chutes of Recreation's All-Metal Land Slide guarantee safe playtime, plus years of maintenance-free operation.

Available in Round or Hexagonal Styles, in open or closed types, are Recreation's Merry-Go-Rounds. Carrying capacity for up to 40 children. Exposed metal parts are hot galvanized—wood parts painted with two coats of high-grade enamel.

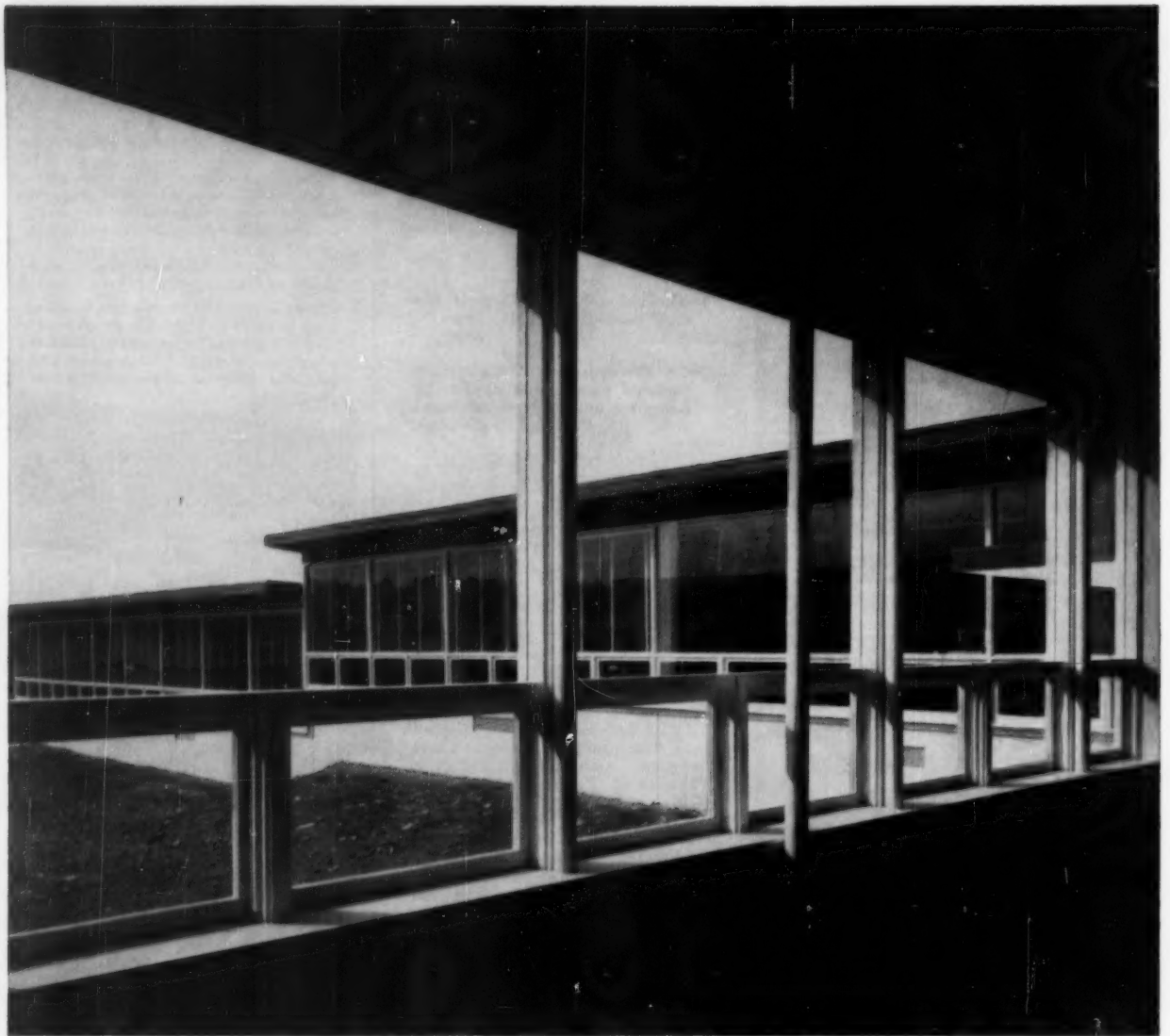
Practical Recreation See-Saws are constructed from hot galvanized, heavy-gauge steel pipe and certified malleable castings. Boards of Yellow Douglas Fir are clamped to notched fulcrum castings. Chain locks prevent removal.

Write for your Recreation Catalog giving complete information about a line of Playground, Swimming Pool and Basketball Equipment.

**RECREATION**

RECREATION EQUIPMENT CORP.

Dept. SE-68, 724 W. Eighth St. • Anderson, Indiana



This "step" construction eliminated blasting.

Architect: Alonzo J. Harriman, Inc., Auburn, Me.



The Twindow units give plenty of daylight. . . .



. . . and prevent cold zones near the outer wall.

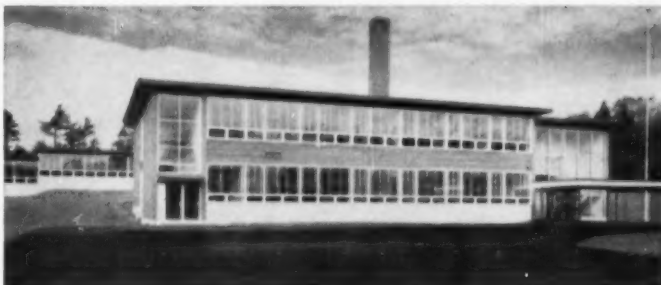
## *Twindow units save heat, increase comfort and visibility*

**T**HE Junior High School at Bath, Maine required careful planning. The terrain had vast quantities of rock, so the architect made use of "step" design. That way, an expensive blasting bill was eliminated.

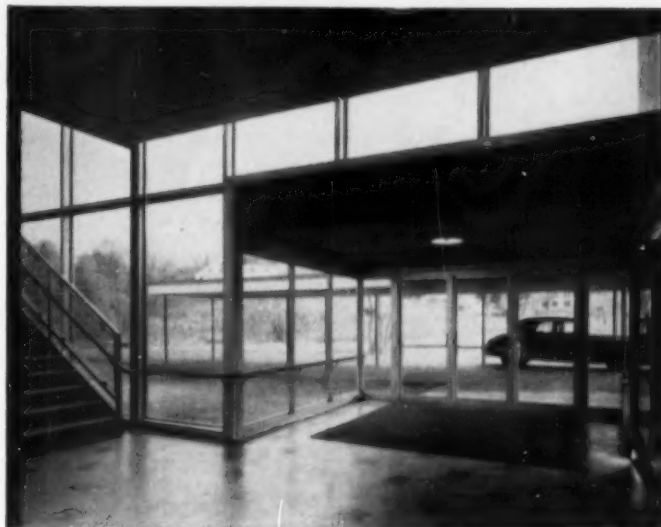
The cold winters were something else. Ordinary windows will steam up and drip, and they form a cold zone near the wall that can chill the blood of the outside row of students.

Twindow insulating windows solved the problem. They have about *twice* the insulating efficiency of single glazed windows, so they save heat. Twindow units reduce window fogging, and because of their insulating value, students can sit near them without chill.

So the students have good visibility in all kinds of weather, they are more comfortable in winter, and the heating bills are low. Twindow double-glazed insulating windows did all three jobs.



See how glass gets rid of the institutional look.



The bright, cheerful lobby. Buses stop outside.

### CONSULT YOUR ARCHITECT

for information about the use of these famous Pittsburgh Glasses in school construction.

#### SOLEX®

—heat-absorbing and glare-reducing plate glass

#### HERCULITE®

—shock-resisting tempered plate glass

#### TWINDOW®

—the world's finest insulating glass

#### POLISHED PLATE GLASS

—for clear, undistorted vision

#### PENNVERNON® WINDOW GLASS

—window glass at its best

*Design your schools better with*  
**PITTSBURGH  
GLASS**



PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS • FIBER GLASS

**PITTSBURGH PLATE GLASS COMPANY**

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

introducing the **NEW**

**TORNADO.**

**13" LIGHT HEAVYWEIGHT  
FLOOR MACHINE**

heavy enough to do the job...  
light enough for everyone

Everything you've ever needed in a floor machine has been incorporated in the all-new Tornado Model 130. This engineering marvel is powerful, rugged and efficient. It's light enough to be carried by anyone, handles smoothly with no "whip" and is well within the economic reach of every institution, from the smallest to the largest.

Housed in aluminum to avoid all rust and corrosion, the new Tornado Model 130, has a special safety switch for finger tip control, non-marking wheels and a large, soft, white bumper that protects furniture and walls.

Floors glisten and sparkle in a jiffy, operator fatigue is reduced when the new Tornado Model 130 does the job.

Write for bulletin 763  
have an on-the-job  
demonstration today!

**BREUER ELECTRIC MFG. CO.**

5088 NORTH RAVENSWOOD AVE. CHICAGO 40, ILLINOIS

# OUR SCHOOLS

what the citizen wants to know about education

## Selecting Equipment for New Schools

By **N. L. ENGELHARDT, Jr.**  
*Engelhardt, Engelhardt and Leggett*  
*Educational Consultants*  
*New York City*

**W**ITH SCHOOL ENROLLMENTS increasing year after year, and more and more new schools under construction, the problem of properly equipping a school takes on new proportions. What are the standards for this equipment and who is responsible for its choice? What changes can be expected in its use and design?

There are so many new shifts in methodology, content and expansiveness in the values of programs, and specifications in terms of the educational needs, that it becomes more important than ever to give the purchasing of equipment the same



*Today's school equipment reflects changes in course content*

thorough analysis that goes into the best planning of a new school building.

### Responding to the Needs

Equipment has been quite responsive to the changing needs of the educational program over the years. This has come about not only through the demands of professional personnel but through the readiness of equipment manufacturers to meet changing needs of educational programs. The fixed chair and desk have given way to movable furniture in response to the present day elementary school's preference for small groups as opposed to the large group technique. There has been a reduction in the amount of chalkboard in the classroom and an increase in the amount of bulletin board, as it has been recognized that the factors in classroom communication

may be expanded beyond the rather artificial blackboard setup.

There has been the developing use of large classrooms in the elementary school, to encompass a wide variety of activities and experiences, with the direct result that utilization is made of a much greater range of furniture and equipment to fulfill the increasing demands of these activities. In every case, equipment has been responsive to the educational needs, and the corollary of this is that the educational needs should be the foundation for equipment design and use.

### A Changing Picture

In the future, and well on the horizon, are a multitude of new demands which will greatly affect the equipment picture. In the primary school, for example, growing recognition is centered on the fact that children in upper elementary grades are not always ready to learn realistically about the abstractions of continents and the peoples of other lands. They are interested in growing things and the surrounding physical world—animals, plants and just "life" itself.

Yet in many respects, there is a tendency to subordinate this interest to social studies and postpone much of the study of science to the years of the secondary school. The question can be raised if this is meeting the needs of young people. It is altogether possible that a new area for equipment many come about as a response to meeting this developing field of elementary science.

### New Concepts—New Content

Further examination will reveal these changing educational needs on the secondary school level also. When the physics laboratory was developed, the purpose of the physics course was directed toward students with abstract reasoning ability who intended to move on into the higher levels of learning in science or engineering. Today, however, the teaching of science aims more at a broad area of understanding, bringing into it the entire range of human ability. Such a change demands a rethinking about the equipment that is required. Does the vast majority of students in school now need the same kind of equipment that was demanded for the traditional

courses in physics? The answer is no.

Another point to be considered is that there are changes taking place in the content of an area of work which has an affect on equipment. To use the science field again as an example, it can be noted that the typical physics laboratory table was designed for Newtonian mechanics rather than nuclear energy, while the chemistry laboratory table was designed for macro experimentations within the limits of the older definition of the chemistry course. Both of these sciences have long since expanded in many directions. Surely, the character of equipment used in their study should keep pace with these developments.

#### **A Stimulating Learning Process**

Of course, in presenting the matters of the world in which man lives there is always present the responsibility of using audio-visual aid equipment, which is in keeping with the known processes of learning. Equipment offers many opportunities to develop curiosity, stimulate imagina-



*The final decision on selection rests with the administrator*

tion and provoke inquiry. Too often, students are presented with equipment which does the whole job and leaves nothing to the imagination. Many of the maps used in teaching geography are examples of this. For instance, the Mercator projection, which exposes the world—often for the first time—to boys and girls as a flat plate, distorts whole continents to great extremes and offers little encouragement for childrens' imaginations to see the world as round and the continents in true proportions. How much better a concept of the world pupils would have if they could build a large globe in the classroom!

In the high school field as well, tremendous changes are about to take place in the methods of introducing subject matter. The success of mass media in presenting basic educational programs—scientific, dramatic and sociological—which are exciting and stimulating, means that educators must step back and reevaluate the prevailing methods. They must present subject matter on a less limiting scale. In media like television and magazines to which young people are exposed constantly outside of the classroom, the spoken and printed word, along with pictures, colors and

sounds, are used to create the impact of the total area of the communication arts.

What does this methodology mean to the classroom? It implies that reliance will not be placed merely on books to be read at the desk. It means that all forms of presentation will be used—the printed and spoken word, of course, but with perhaps as much emphasis on art and music also as methods of communication.

#### **Planning the Steps**

When a new school is built, a method of procedure is usually followed carefully step by step. Ideally, this same planning should go into the selection of equipment. This process should start as early as possible when a new school is being built to insure maximum results. Even the most beautiful school can be spoiled functionally and aesthetically by poor or inadequate equipment. Some of the guiding points which are essential in any equipment program are listed below. If such a program is followed, there is greater assurance that overall education aims will be considered.

1. a plan of operation, put into action early
2. delegation of responsibility
3. setting up a time schedule to integrate with building planning
4. establishing a bibliography of references
5. insisting upon use and recognition of professional skills and experiences in equipment selection
6. making an educational specification record of each desired product
7. setting up specifications for technical or structural performance
8. agreeing upon a budget with allocations for all needs.

#### **Who Participates? Who Selects?**

Many different individuals and groups have a vital interest in the result of selecting equipment. These include school boards, superintendents of schools, business managers, principals, parent groups, pupils, teachers, custodians, educational consultants, architects and engineers. Although the thought has sometimes prevailed that all persons, regardless of background or insight into the curriculum, are able to render effective service in equipment selection, this may not necessarily bring about the best results if such service is not properly utilized. There is no doubt, of course, that a cooperative process has great merit.

It seems reasonable to assume that those who use a specific type of product should have a good part in the determination of its purchase. Thus, teachers would participate more than any other group in the initial recommendations on equipment of all kinds. This would particularly apply to teaching materials, library materials, physical education equipment, furniture and classroom

equipment, laboratory and shop equipment, home-making furnishings and audio-visual equipment. Custodians would give their opinions not only on boilers, sinks, mops and pails, but on woods, floors and wall finishes as well. Students might voice their opinions on chair sizes and color choices.

After initial selections, the superintendent of schools and the assistant superintendent in charge of business affairs would take an active part in the review of the recommendations, making final decision with due reference to price and availability, and setting the equipment purchasing machinery into action.

Recent years have shown a trend in this direction of general participation with the people involved directly. However, the participants function only in an advisory capacity to the board of education and/or the appointed authority. This participation should start first with a discussion of the educational program and its direction.

#### **Writing an Equipment Program**

An ideal method of selection would be to ask each professional educational group, expecting to use the proposed school, to begin its study and ex-

ploration of the needs months ahead of the other steps in the planning of the building. In this way, some of the equipment under consideration could well be tested in classrooms which were in use. Or, there could be study of equipment in other new schools in the locality or in commercial exhibits.

Each teaching group should be encouraged to develop its own report, in which the types of equipment desired would be itemized and illustrated. The educational and material reasons for selection should be given. In such reports, the aims of each subject area would become apparent, and the planners of a school building would be aided greatly. Area layouts of rooms could be made from the beginning with the equipment space requirements in mind, and the chance of omission would be reduced to a minimum.

Such a program for the selection of equipment would give the best possible assurance that the school building would be planned to meet both present and future educational needs. Certainly, professional educators cannot afford to delegate this matter to others not possessed of educational experience or the know-how of teaching.

## **School Building Costs and Bond Prices**

by **HAROLD F. CLARK**

*Economic Analyst  
Teachers College, Columbia University*

**T**HE INDEX of school building prices advanced during the month of April to 216.1 (1939=100). In March the index was 215.3.

The rise in April was a relatively large increase compared to recent months. All indications, however, point toward a further rise. There has been a consistent increase in the price of the basic metals. The price of steel will probably advance even further. The copper price has been close to the high point of the last century, and may show some slight decline from the present extraordinarily high rates. Most other metals important in the building field give promise of continued strength. Also, other building materials are showing a tendency to rise in price.

The general opinion was that 1956 would be a good year for the building industry. As the figures have come in month after month, it is becoming increasingly clear that new all-time high records are being set in the volume of building. By the end of the first quarter, it was clear that the expectation of business was to increase capital expenditures by as much as 15 to 20 per-

cent over the very high rates of last year.

In early January, the assumption was that residence building would decline as much as 5 percent from last year. Instead of that, some months are showing an actual advance over the previous year in the dollar amount of housing.

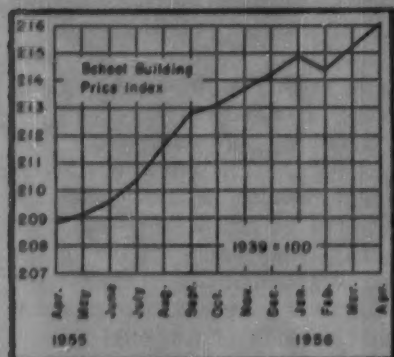
The actual number of homes beginning construction remains very close to that of last year. The price of building labor has also increased substantially. New all-time highs in the total amount of construction, plus increased costs for building materials and labor can add up to only one result—higher prices for school buildings.

**T**HE AVERAGE INTEREST rate on school bonds sold in April was 3.06. In March, it was 2.88. School bond interest rates have been showing a tendency to rise for some weeks. Basically, this has been caused by increased concern shown by banking authorities over the economic boom. Finally, the Federal Reserve authorities took action and raised the rediscount rate from 2½ to 2¾ percent. Two of the banks raised their rates to 3 percent. This follows other earlier rises. The banks all over the United States immediately raised the rates charged for loans. Throughout the country, rates for the strongest and most

reliable borrowers were raised to 3½ percent.

This rise in interest rates seems to be almost a world-wide phenomena. Governments are having extreme difficulties in controlling the rise.

The total debt of all types has been rising with great rapidity during the past year or two. Some authorities feel that debt is rising faster than income. Installment debt has risen \$5 billion during the past year. The total mortgage debt on private homes has shown a great rise also. Municipal borrowing of all types has increased greatly. Many special types of bonds have been issued. This is



The index of school building prices increased in April to 216.1

particularly true of special highway bonds secured by tolls on the new roads. In addition, corporations have borrowed huge amounts of money in order to expand their resources. Many economists have been wondering how long the expansion could continue without pause.

Although the Federal Treasury has not been increasing its borrowing, it has felt the full affect of higher interest rates. A recent newspaper headline read: "Rate on Treasury Short-Term Bills Rises to 2.769%, Highest Since 1933." Interest rates on all maturities of federal bonds have also shown substantial rises. A question in everybody's mind is: Will the recent rise in interest rates slow down the boom enough to bring reasonable stability? Everyone wants an expanding economy, but few want it at the price of a collapse. Many authorities were beginning to feel that the expansion of credit was going on so fast that ultimately collapse was inevitable unless the rate could be slowed down.

Clearly, no one likes to pay higher interest rates, but it is far better to have some rise of interest rates today than a collapse of the economy at some future time. The general opinion is that the Federal Reserve authorities are determined to bring the boom under control.

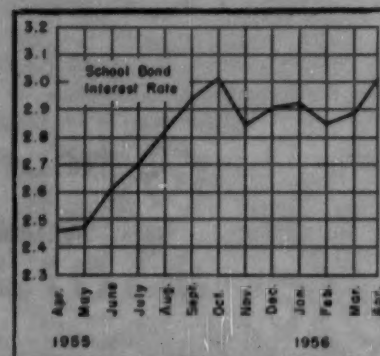
A few months ago, a school district with fairly

good credit rating would not have considered a rate of 2¾ or 3 percent on school bonds. During past weeks, it has not been unusual for school districts with fairly good credit ratings to have to pay something close to 3 percent for their bonds. Other communities which have not made real efforts to market the bonds have found themselves paying even higher rates.

Present relatively-high interest rates do constitute a real problem as far as school boards are concerned. Shall they go ahead and issue bonds as intended and simply pay the higher rates? Clearly, the intention of the federal authorities is to slow down some of the borrowing. If the present rates will not do it, then higher rates will have to be used. Presumably, the least-necessary expansion will be stopped. Clearly, what the Federal Reserve Board is trying to do is to influence cancellation of marginal projects at this time. This is certainly no time to proceed with the construction of a school building if it is not needed. On the other hand, where the need is urgent, the school board should proceed with planned construction.

Total construction may ease off in a few months and give school building a chance to expand. In

... while the interest rate on school bonds continued its climb to 3.06



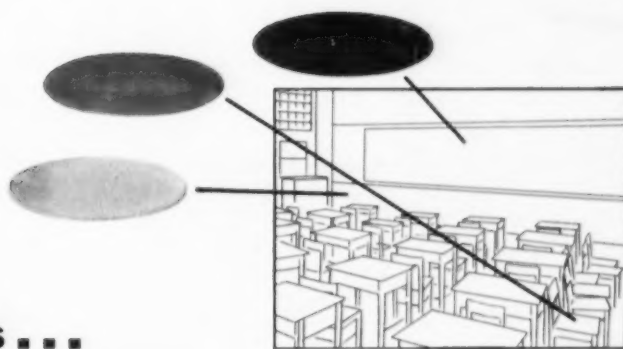
any case, it seems inevitable that there must be a great expansion of school building in the immediate future. Unless total construction does drop reasonably soon, the Federal Government may have to postpone some of its actions that are expanding construction in the building field. The children will come of school age in increasingly larger numbers and there is a limit on how long school building construction can be postponed.

Federal Reserve authorities seem determined to bring the inflationary boom under control. Until there is some shift of policy on the part of Reserve banks, there can not be much of a drop in school bond rates. As high as school interest rates look, they are still low on a long-time basis.

Next Month: Strengthening Public Interest in Schools—Clint Pace

No. 140. Reprints in quantities of ten or more may be purchased from The School Executive, 470 Fourth Avenue, New York 16, New York. 10 copies for 1 month: \$1.00, for 12 months: \$10.00; 25 copies for 1 month: \$2.00, for 12 months: \$20.00; 50 copies for 1 month: \$3.00, for 12 months: \$30.00; 100 copies for 1 month: \$5.00, for 12 months: \$50.00.

**By using  
the right colors  
in the right places...**



## **DU PONT COLOR CONDITIONING**



**makes  
school  
buildings  
more  
efficient!**

In hundreds and hundreds of school buildings all over the country, Du Pont Color Conditioning is increasing the comfort and efficiency of students and teachers alike. This scientific painting plan utilizes carefully selected colors to diffuse light, smooth out glare and assure uniform brightness... brings new efficiency to all types of school build-

ings, both old and new. Visual strain and fatigue are minimized... both learning and teaching are made easier!

Du Pont Color Conditioning costs no more than ordinary painting; it actually costs less in the long run. And new paint formulas make Color Conditioning Paints *odorless* during application! Now you can put this scientific painting

plan to work for you without the interruption of normal routine so often caused by annoying "painty" smells! To discover the many ways Du Pont Color Conditioning can pay off for you, mail the coupon today!

**FREE 32-PAGE BOOK!** Find out how Color Conditioning can meet the specific needs of your building interiors. Get this book, illustrated in full color. Mail the coupon today!

### **Du Pont Color Conditioning Paints Are Now Odorless**

**Now you can paint busy areas  
without interrupting normal routine**



**Better Things for Better Living... through Chemistry**

E. I. du Pont de Nemours & Co. (Inc.)  
Finishes Division, Dept. EX-66  
Wilmington 98, Delaware

Gentlemen:

Please send me, at no cost, your 32-page book,  
"Du Pont Color Conditioning."

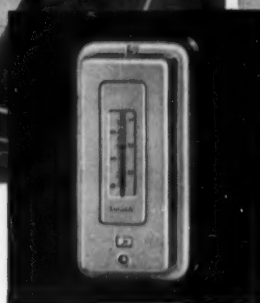
Name

Title

Address

City and State



**Cincinnati Public Library***Architects:* WOODIE GARBER & ASSOCIATES*Associated Architects:* SAMUEL HANNAFORD & SONS*Mechanical Engineers:* WM. E. BODENSTEIN & W. W. SHUSTER*Htg. and Air Cond. Contractor:* PECK-HANNAFORD & BRIGGS CO.*Ideal Comfort in this*

## Department Store of Knowledge

*Is Assured by* **POWERS** *Year 'round  
Air Conditioning  
Control System*

Cincinnati now has one of the nation's most colorful and attractive contemporary libraries. It is fully air conditioned.

Some of the Library's many features are: a children's room with child's size furniture, also a story hour room; film and recording center; a rare book room and director's room with stainless steel operable louvers on the exterior; rooftop terrace with planting boxes and reflecting pools; ground floor has a garden, pool and parking lot.

As modern as the building itself, is the Powers individual space control system which assures these important benefits: Maximum thermal comfort and fuel savings; low operating and maintenance cost; 25 to 40 years of reliable control with a minimum of repairs often reported by users.

Consult Powers on your temperature and humidity control problems. Experience gained here and in thousands of other significant buildings may be helpful to you.



### THE POWERS REGULATOR COMPANY

SKOKIE, ILLINOIS

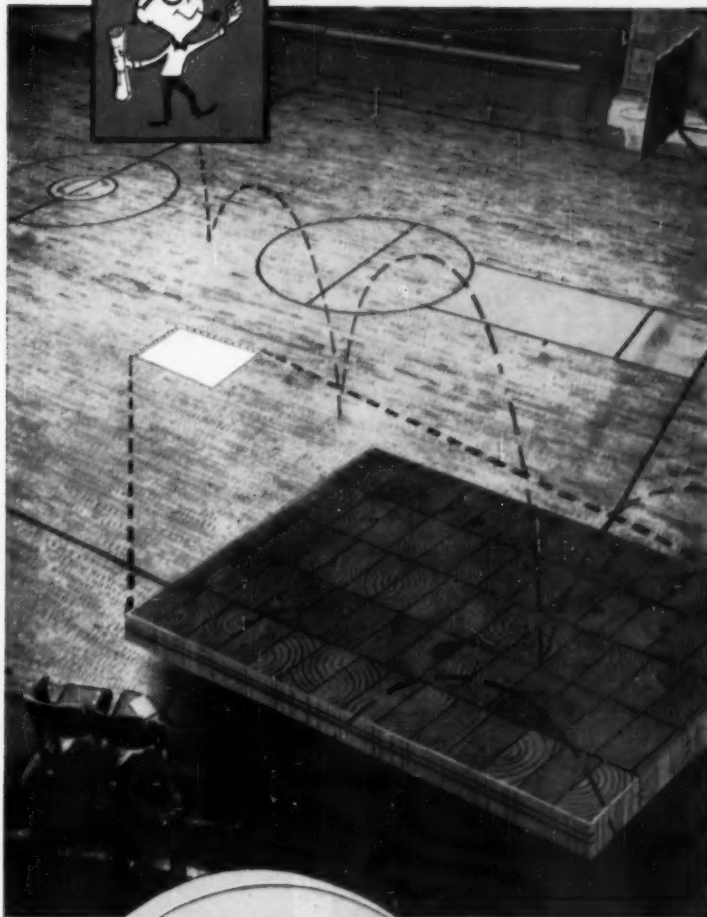
*Offices in chief cities in U.S.A., Canada and Mexico*

(c61)

*65 Years of Automatic Temperature and Humidity Control*



Take a tip from the guy who knows:



**FOR NATURAL BEAUTY  
AND RUGGED  
DURABILITY...  
INSIST ON *Kreolite!***

If you're looking for a school flooring material that offers both beauty and durability, then *insist* on Kreolite Flexible Strip End Grain Wood Block Flooring!

No flooring material made can match the beauty of Kreolite's natural finish woods and the rugged durability of its famous end grain construction.

Ideal for school gymnasiums and vocational shops, Kreolite is economical to install, resilient underfoot. And you'll find that Kreolite Flooring is a cinch to maintain!

Discover for yourself why so many architects, school boards and school executives *insist* on Kreolite. Fill out the coupon below today!

**The  
Jennison-Wright  
Corp.**

**2463 Broadway  
Toledo 9, Ohio**

*Canisius High School  
Arch.—Albert A. Rumschik  
Buffalo, New York*

## **KREOLITE FLEXIBLE STRIP END GRAIN WOOD BLOCK FLOORS**



Please send me a free sample and complete specifications of Kreolite Flexible Strip End Grain Wood Block Flooring.

Name

Address

City  State



## SPECIFY LYON FOR-

★ **STURDY CONSTRUCTION** through skyscraper design of channel steel frame. Chairs adjust to uneven floors without frame distortion.

★ **REAL COMFORT** because both seat and back are curved to match body contour.

★ **EXTRA SAFETY** because hinges are pinch-proof. All edges are rounded and smoothed to prevent cutting or snagging.

★ **LONG LIFE** because 14 gauge channel steel frame is built for hard usage. Baked-on enamel finish lasts for years.

**AND-**

LOCKERS  
STEEL SHELVING  
STORAGE CABINETS  
FILE CABINETS  
WORK BENCHES  
DRAWING TABLES  
KITCHEN CABINETS

# LYON

## STEEL EQUIPMENT

## FOR SCHOOLS

★ Lyon Folding Chairs are available in a variety of models beautifully finished in your choice of rich taupe or walnut. Upholstered models also available.

★ A full line of accessories includes tablet arms, ganging equipment and trucks designed for easy moving and storage of chairs.

• Write for new, illustrated catalog which gives complete details on Folding Chairs and other Lyon school equipment.

LYON METAL PRODUCTS, INC.  
General Offices: 614 Monroe Ave., Aurora, Ill.  
Factories in Aurora, Ill. and York, Pa.  
Dealers and Branches in All Principal Cities

### A PARTIAL LIST OF LYON STANDARD PRODUCTS

- |             |                    |               |                        |                     |                  |                 |               |
|-------------|--------------------|---------------|------------------------|---------------------|------------------|-----------------|---------------|
| • Shelving  | • Kitchen Cabinets | • Tool Toters | • Chests and Safes     | • Flat Drawer Files | • Folding Chairs | • Service Carts | • Tool Stands |
| • Lockers   | • Cabinet Benches  | • Bar Racks   | • Display Equipment    | • Revolving Bins    | • Coat Racks     | • Sorting Files | • Shop Boxes  |
| • Stools    | • Storage Cabinets | • Tool Boxes  | • Toolroom Equipment   | • Filing Cabinets   | • Work Benches   | • Drawer Units  | • Tool Trays  |
| • Bin Units | • Drawing Tables   | • Parts Cases | • Wood Working Benches | • Hanging Cabinets  | • Bench Drawers  | • Hopper Bins   | • Shop Desks  |

**Quiet  
is a  
modern  
necessity**

Johns-Manville Fibretone ceilings make teaching easier in St. Mary's School, Nutley, N. J., by muffling distracting classroom and corridor noise.

Architect: Wm. Neumann and Sons, Jersey City, N.J.



## *Reducing classroom noise to study room Quiet*

**Johns-Manville Acoustical Materials meet today's  
need for low-cost sound control**

Schools and institutions of all types depend on modern materials to achieve maximum efficiency. That's why practically all new building and modernization specifications include acoustical ceilings to reduce disturbing noise.

Johns-Manville offers a complete choice of highly efficient sound absorbing materials for every acoustical need.

- **J-M Permacoustic® Units**—combine maximum acoustical efficiency with architectural beauty. Has attractive fissured surface. Made of mineral wool, Permacoustic meets all building code fire-safety requirements.

- **J-M Fibretone® Units**—provide high acoustical efficiency at modest cost. Hundreds of small holes, drilled in a Uniform or Variety pattern, act as "noise

traps." Fibretone has a white paint finish. Available with flame-resistant finish.

- **J-M Sonacoustic® Units**—perforated metal panels backed with a fireproof, highly sound-absorbent element. Noncombustible and sanitary. The white baked-enamel finish is easy to keep clean, and may be repainted.

- **J-M Transite® Acoustical Panels**—perforated asbestos-cement facings backed with a mineral wool sound absorbing element. Suitable in areas with high humidity (dishwashing rooms, kitchens, swimming pools, etc.).

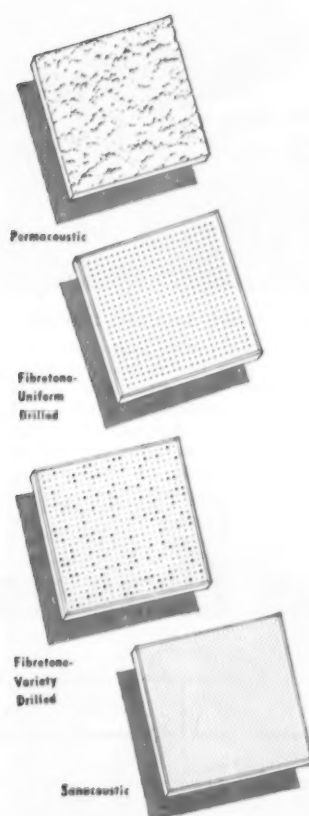
For a complete survey by a J-M Acoustical Engineer, or for a free book entitled "Sound Control," write Johns-Manville, Box 158, Dept. SE, New York 16, N. Y. In Canada, write 565 Lakeshore Road East, Port Credit, Ontario.



See "MEET THE PRESS" on NBC-TV, sponsored alternate Sundays by Johns-Manville

## **Johns-Manville**

**45 years of leadership in the manufacture of acoustical materials**





## *Safety plus...because of Dodge dependability*

The dependability of Dodge School Buses is looked upon by those responsible for American school children as a safety factor that goes far beyond the usual safety requirements.

*You can be sure*, when your school bus is a Dodge, that it incorporates the newest and finest advances in school bus design and engineering, and that it has been built with the care and extra strength traditional with Dodge products. *You can be sure* that it meets or exceeds all safety standards recommended by the National Conference on School Bus Standards.

Your Dodge dealer will tell you why a Dodge School Bus can promise you low-cost, dependable transportation, year after year. See him soon.









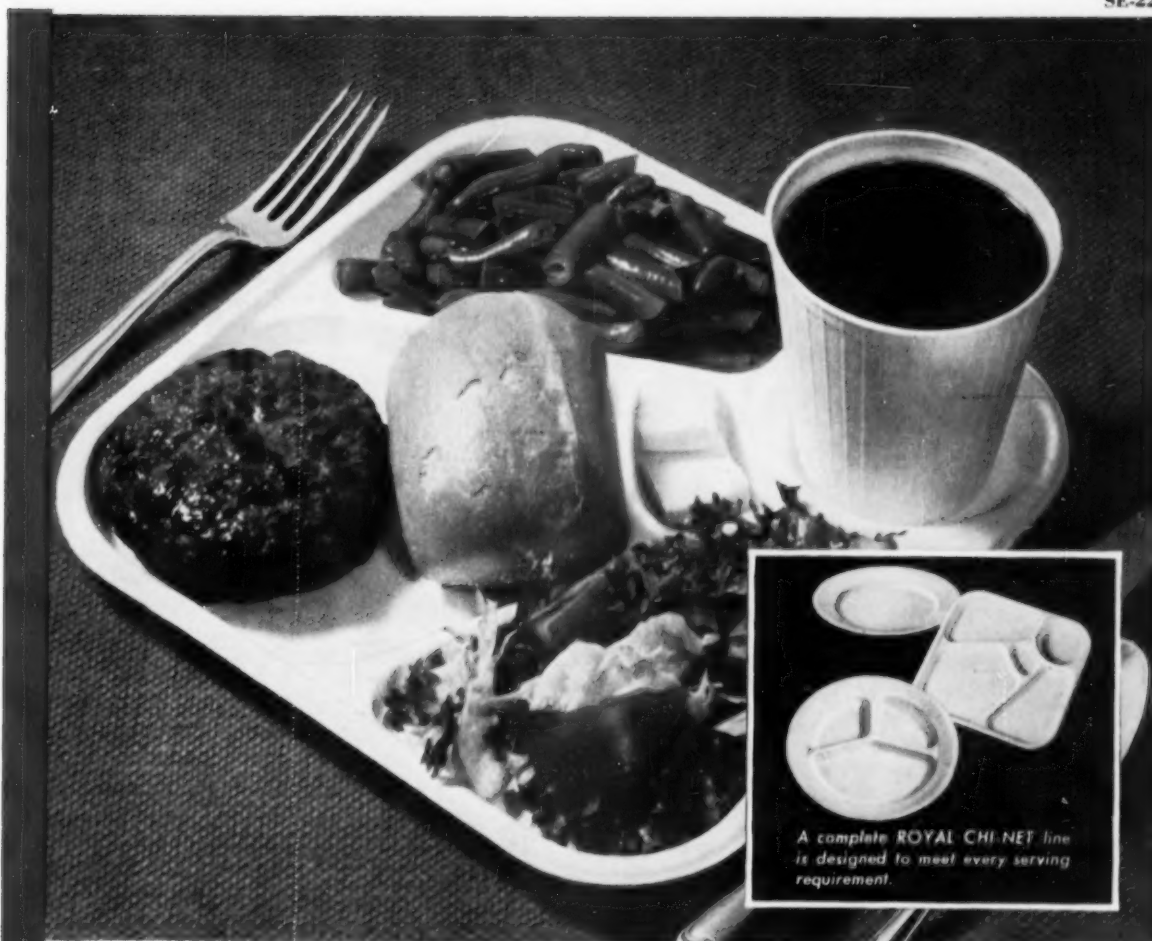
### **NEW "TOWN WAGON" FOR SMALLER SCHOOLS**

Also for larger schools as a feeder bus. Strongly built body on rugged Dodge  $\frac{1}{2}$ -ton truck chassis. Wide seats comfortably accommodate eight adults. Rear seat easily removed, providing 90 cu. ft. of cargo space. Two separate braking systems for extra safety. Powered with either the thrifty six-cylinder engine or the famed Power-Dome V-8.

# **DODGE "Job-Rated" School Bus Chassis**

School Bus Chassis for Bodies Accommodating 30, 36, 48, 54, 60, and 66 Passengers

					
<b>MODEL G58, G58-153" WB</b> 10,500 and 12,000 lbs. G.V.W. For 30 and 36 pupils.	<b>MODEL H58, H58-193" WB</b> 14,500 and 16,000 lbs. G.V.W. For 48 pupils.	<b>MODEL H58, H58-217" WB</b> 14,500 and 17,000 lbs. G.V.W. For 54 pupils.	<b>MODEL HH58, HH58-217" WB</b> 17,000 and 18,000 lbs. G.V.W. For 54 pupils.	<b>MODEL K58-238" WB</b> 17,500 and 21,000 lbs. G.V.W. For 60 pupils.	<b>MODEL K58-254" WB</b> 21,000 lbs. G.V.W. For 66 pupils.



hold, carry, serve  
an entire meal  
including the beverage  
with the new

## ROYAL CHI-NET® SQUARE MEAL TRAY

- ★ gleaming china-white
- ★ waterproofed and grease-resistant
- ★ individually molded for extra strength
- ★ clean, sanitary, sterilized in manufacture
- ★ excellent for both hot and cold foods
- ★ ideal service for TV dinners



Built-in cup compartment makes the  
KEYES SQUARE MEAL TRAY the only truly single-service plate

FILL IN THIS COUPON

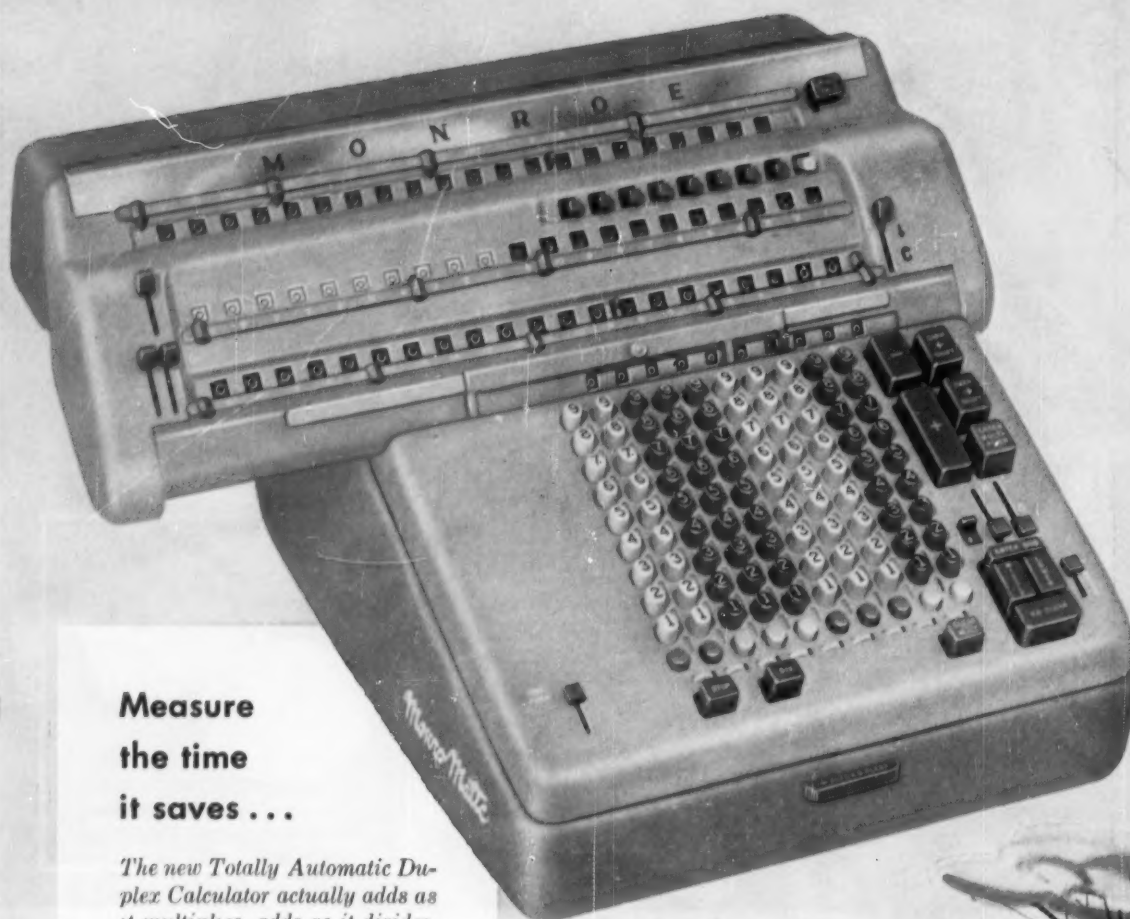
KEYES FIBRE COMPANY, Dept. SE, Waterville, Maine

Please send further information on the new ROYAL CHI-NET Square Meal Tray.

NAME .....

NAME OF FIRM .....

ADDRESS .....



**Measure  
the time  
it saves . . .**

*The new Totally Automatic Duplex Calculator actually adds as it multiplies, adds as it divides, stores and "remembers" intermediate results applying to the final answer.*



## **SPEED county and state reports**

The revolutionary Monro-Matic *single* keyboard speeds and simplifies all figure-work, with automatic squaring, automatic zeros and decimals. Push a key . . . automation takes over, puts the answer into the dials in split-second time.

These newest, fastest desk calculators greatly

reduce the time consumed in preparing state and county reports—in figure-work of many kinds in school business offices.

Why settle for less than Monro-Matic, the calculators with automation, the preferred investment, assurance against obsolescence.

See the MAN from **MONROE**  
for CALCULATING • ADDING • ACCOUNTING MACHINES

# Planning a Gymnasium?



*Here's how to reduce cubage;  
make big savings on  
building and heating costs*



**New**

**Calculator enables you to plan maximum  
balcony seating with minimum ceiling height**

Designed by *Universal* engineers after years of on-the-job experience, this new calculator is now available to every architect and school official involved in planning a gymnasium. It is of inestimable value in determining balcony height for ideal seating sight line in relation to main floor seating. At the same time, it shows how such planning can reduce ceiling height to a practical minimum... for big savings in both building and heating costs. This calculator also figures seating capacities in relation to gym sizes, has  $\frac{1}{16}$ ",  $\frac{1}{8}$ ", and  $\frac{1}{4}$ " scales as well as a standard rule. *Send for yours today.*

Also figures seating  
capacity per gym  
size... or vice versa

**IT'S YOURS  
FREE  
FOR THE ASKING**

**UNIVERSAL BLEACHER CO.  
Champaign, Illinois**

*I would like \_\_\_\_\_ (how many?) of your calculators  
which can be used to advantage in planning a new  
gymnasium. This request involves absolutely no cost  
or obligation to me.*

Name \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

# Increases the yield of good teaching....



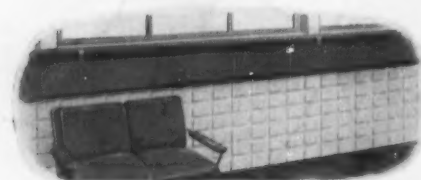
**THE NESBITT SYNCRETIZER**, basic performer in a system of heating and ventilating now enjoyed in more classrooms than any other unit. Fully explained in Publication 100.



**SYNCRETIZER WITH WIND-O-LINE RADIATION**, meets two extreme needs: classroom heating and ventilating and cold surface protection. Reduces overall costs when installed as the Series Hot Water Wind-o-line System. Publications 101, 104.



**THE NESBITT PACKAGE**—the Syncretizer and the Wind-o-line Radiation are integrated with Nesbitt Storage Cabinets for a desirable combination of comfort, beauty, and utility. All the components are described in Publication 101.



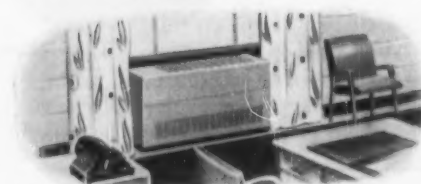
**NESBITT SILL-LINE RADIATION** is today's most beautiful form of perimeter heating with design, capacity and performance well suited to corridors and administrative areas. Publication 102.



**SILL-LINE WITH STORAGE CABINETS**—a low-cost integration of beauty, utility, and perimeter radiation for rooms where controlled ventilation is deemed unnecessary. Publication 102S.



**THE NESBITT THERMOVENT** is the recommended means of heating and ventilating auditoriums and large assembly areas where quietness is essential. Only Nesbitt Thermovents have the exclusive sound absorbing plenum. Publication 270.



**NESBITT CABINET HEATERS**—deluxe units designed and constructed for blast heating in entrance vestibules and lobbies. May be installed fully- or semi-recessed. Publication 403.

# Nesbitt

**CREATING BETTER PRODUCTS  
FOR INDOOR THERMAL COMFORT**

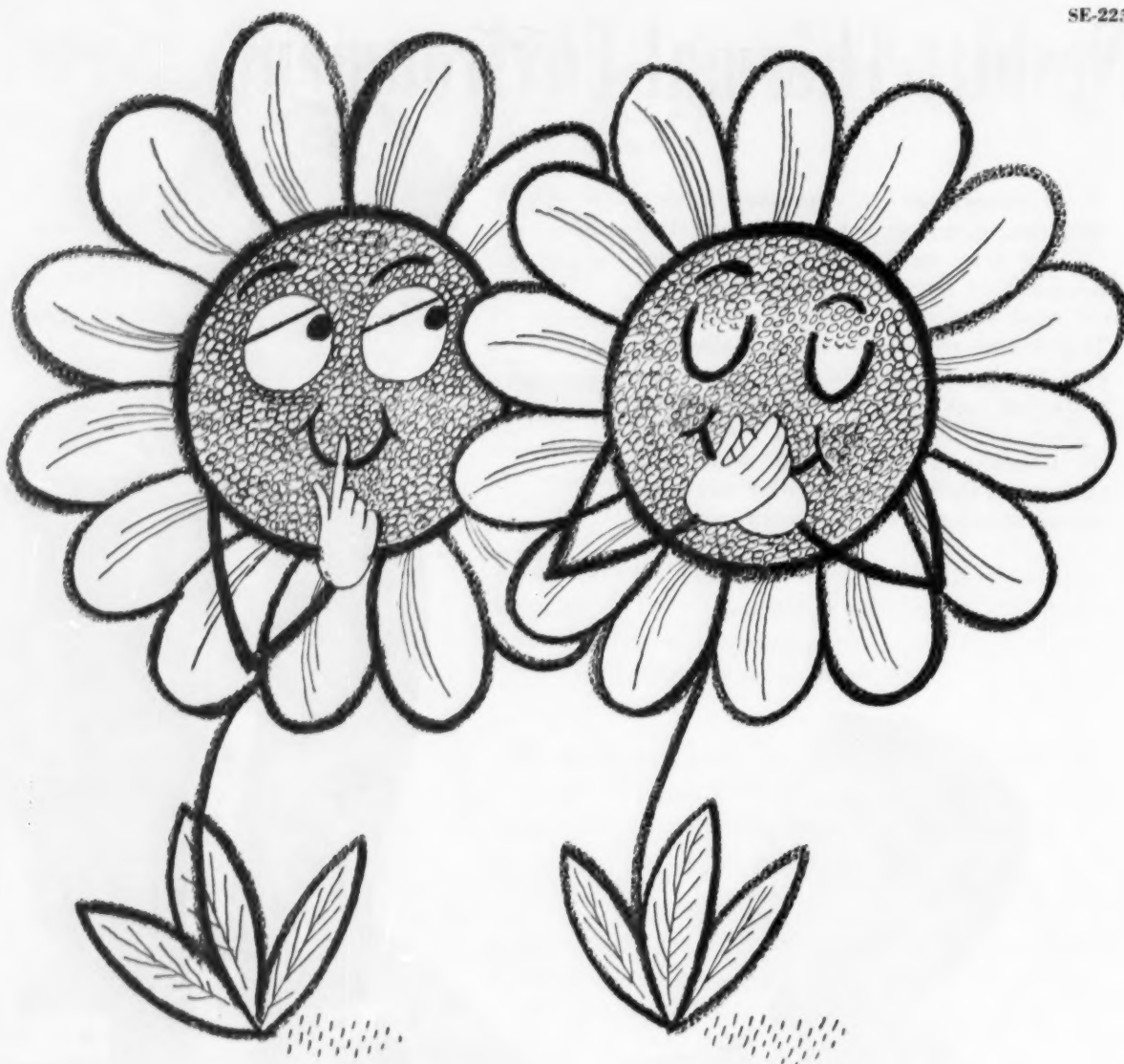
MADE AND SOLD BY JOHN J. NESBITT, INC., PHILADELPHIA 36, PA.—SOLD ALSO BY AMERICAN BLOWER CORPORATION

# Nesbitt Thermal Environment

Three dimensions of America's schools are housing, equipment, and instruction. By wise investment, some of your equipment dollars can add a fourth dimension: *the most conducive learning environment.* The dollars so spent help to safeguard your total investment and to assure the maximum yield from the learning process.

Since 1917 Nesbitt has led the field in the creation of heating and ventilating equipment that has raised ever new and higher standards of classroom comfort.





## Daisies won't tell. So maybe we should

The popularity of Royal Standards with typing teachers is like one continuous Valentine's Day from September to June.

Year after year, too.

The reasons are as obvious as a zebra at the Kentucky Derby.

Royal Standards are easier to teach on. Easier for the pupil to learn on, too. *That* makes it easier on everybody.

Royal also offers every one of you a wealth of teaching aids.\* They are right on the button . . . pedagogically correct . . . and *new*. AND FREE!

And most important, Royal offers you the finest, most rugged precision writing machine built. Just

means you've got all your Royals working all the time, every class.

Yes, it's a real love affair between teachers and Royal Standards. So real that daisies won't tell. Thought we'd better. Everybody ought to know how popular Royal Standards are.

\*Write to "The School Dept., Royal Typewriter Company, Port Chester, N. Y."

**ROYAL**® standard

ELECTRIC • PORTABLE • Roytype® business supplies

Royal Typewriter Company, Division of Royal McBee Corporation

# NEW AMERICAN SEATING FOLDING CHAIR INCREASES SEATING CAPACITY 30%!

Greatest advance in folding chairs in 25 years, with space-saving design, luxurious comfort!



Chairs are clamped together in units of two—for fast, easy storage or seating rearrangement. Handle between coupled chairs permits balanced carrying.



Independent fold, demonstrated above, is new design feature which permits 30-inch back-to-back spacing, increasing seating capacity almost one-third.



New independent-fold folding chair, with upholstered spring arch, is the latest addition to American Seating's complete line of folding chairs. Other models are also available in these seat styles—birch plywood, shaped steel, imitation leather upholstery. All offer unequalled durability, thanks to rugged, steel-frame construction, Bonderized metal parts.

Now, INCREASE auditorium and meeting-room seating capacity almost *one-third* with American Seating's new folding chair!

New design includes a seat that folds independently of the chair . . . for back-to-back spacing of only 30 inches . . . nine inches less than that necessary for conventional folding chairs!

And audiences enjoy the luxurious comfort of American Seating body-contour styling, and spring-arch construction of the upholstered seat.

Chairs are free of binding, pinching, and snagging hazards; are silent in use. The center of gravity is so located that they cannot tip forward.

What's more, chairs lock together in units of two by means of metal clamps. A handle installed between coupled chairs permits balanced handling, and easy folding for quick storage.

Chairs are available in a broad choice of frame colors, and upholstery colors and materials. Back panels come plain or fully upholstered.

More American Seating Folding Chairs are bought for schools, churches, and other public meeting places than any other make. Why? Because American Seating offers the most complete line, with the greatest use-value in each price bracket. Let us demonstrate—soon.



GRAND RAPIDS 2, MICHIGAN

Branch Offices and Distributors in Principal Cities.  
Mfrs. of Folding Chairs; School, Auditorium, Theatre,  
Church, Transportation, and Stadium Seating.

**WORLD'S LEADER IN PUBLIC SEATING**

# *Your* **FUND-RAISING PROGRAM**

*How much can you raise?*

*How long will it take?*

## **A CONFERENCE WITH THE AMERICAN CITY BUREAU WILL ANSWER THESE IMPORTANT QUESTIONS**

Fund-raising by the American City Bureau applies a durational perspective to your money goal. Your invitation to us initiates a careful study and evaluation of your financial potential. And we continue at our own expense with a thorough analysis of anticipated interest, enthusiasm and response.

We will then render an objective and constructive report on the findings. If this indicates that we can be of service to you, our proposal will pin-point operational methods and costs. In short, how much you can raise and how long it will take.

So, if you would like to marshal increased goodwill and service as well as new financial strength, call upon the long experience and proven integrity of the American City Bureau.

*There is no substitute  
for experience*

# American City Bureau

(ESTABLISHED 1913)

221 North LaSalle Street, Chicago 1, Illinois  
470 Fourth Avenue, New York 16, N. Y.



CHARTER MEMBER AMERICAN ASSOCIATION OF FUND-RAISING COUNSEL



Cloverlane comes in smart pastel colors that you can mix or match. Complete line of pieces now available . . . even including serving platters.

# it's new... it's beautiful... it's Cloverlane

## *The melamine dinnerware designed for schools*

There's no 'institutional look' to this newest dinnerware . . . yet it's practical down to the very cup handles. It's CLOVERLANE . . . with beauty and functional high-style. It's CLOVERLANE . . . designed solely for mass feeding with all these features:

**Practically Unbreakable**—CLOVERLANE is virtually indestructible. Even when subjected to the most severe use it should cut replacement costs at least 50%.

**Faster Washing and Drying**—CLOVERLANE's smooth, contoured surfaces and its aerated base speed washing, rinsing, and drying . . . minimize spotting. And CLOVERLANE can take the hottest water your automatic dishwasher can handle.

**Easy Stacking—No Sticking**—The exclusive design of CLOVERLANE dishes permits constant air circulation . . . prevents dishes from sticking together, even when stacked damp.

**Better Handling**—CLOVERLANE is designed for ease of handling. CLOVERLANE cups, for example, have recessed thumb

rests that aid balance and minimize spillage. And CLOVERLANE's light weight makes light work of lifting large tray loads.

Besides these exclusive features, CLOVERLANE has all the other advantages of melamine dinnerware. It's quiet—there's no rattle and clatter—its insulating properties help keep food hot or cold and eliminate the need for warming dishes. Ask your dealer about CLOVERLANE and write for full color brochure. No obligation, of course.

Dinnerware Division  
**Chicago Molded Products Corp.**  
1013 N. Kolmar Avenue  
Chicago 51, Illinois



Send full details on Cloverlane.

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

Zone \_\_\_\_\_

State \_\_\_\_\_



## **FIRST with the petroleum industry ...NIBROC® TOWELS**



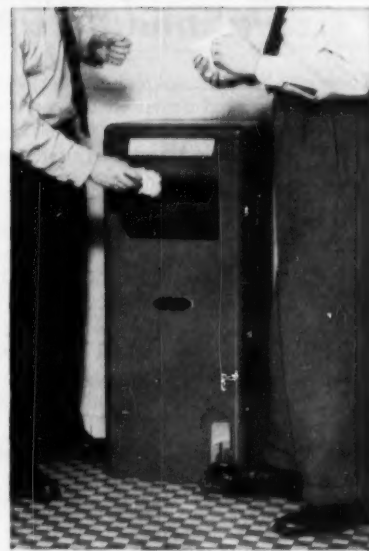
The paper towel that dries more hands in industry and institutions than any other is now first in America's great petroleum industry.

- 1.** Nibroc Towels are tailor-made to fit your hands.
- 2.** Come from cabinet flat and ready to use instantly.
- 3.** Available in various sizes—in either white or tan.
- 4.** Only with Nibroc—can you get the

exclusive TAMP®, which slashes maintenance costs, ends washroom mess, reduces fire hazard. Packs *five times more* waste in receptacle.

**5.** Ask us to prove guaranteed savings with Nibroc "3-T Thrift Plan"—Towels, TAMP, Tissue. Lowest annual cost per employee.

**6.** See TAMP in action! Ask your dealer; he's listed under Paper Towels in the Yellow Pages. Or write Dept. LN-6, Brown Co., 150 Causeway St., Boston 14, Mass.

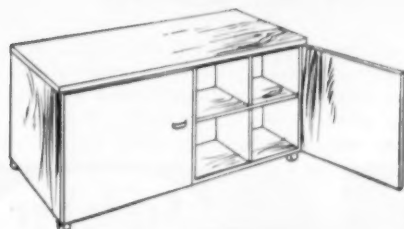


**NEW NIBROC TAMP.** ... Pull out towel. Step on pedal. Drop towel in chute. TAMP does the rest.



A VERSATILE LINE THAT  
MEETS EVERY SCHOOL NEED

## MULTI-PURPOSE CLASSROOM CABINETS



### Surfaced Both Inside and Out with Maintenance-Free NEVAMAR

National brings to the classroom a complete new line of versatile multi-purpose cabinets that provide every type of storage facility as well as ideal work surfaces. Completely surfaced inside and out with Nevamar, the super-smooth high-pressure laminate, these units are virtually indestructible . . .

never need painting or refinishing and are completely vermin-proof. They are easily moved about — can be quickly arranged to serve every possible classroom requirement. And they can be used effectively as room dividers, creating a functional storage wall. Constructed with cabinetmaker precision for lasting service in a specially developed Nevamar honey-maple finish, the complete line offers a wide choice of different units.

Literature available upon request.

*This is*  
**NEVAMAR®**

- a high-pressure laminate surface
- designed for long life and lasting beauty
- resistant to cigarette burns
- withstands boiling water
- won't craze, crack or peel in normal use
- not affected by alcohol, fruit acids, ammonia, ordinary ink or time
- easy to clean

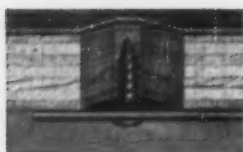
REMARK:  
TAP HERE FOR THE LAST  
★  
Guaranteed by  
Good Housekeeping  
as one of America's best

**NATCOLITE**  
TOP  
NATIONAL STORE FIXTURE CO., INC.  
ODENTON, MD.

## NATIONAL SCHOOL FURNITURE COMPANY

Div. of National Store Fixture Co., Inc.

**ODENTON, MARYLAND**



### OTHER

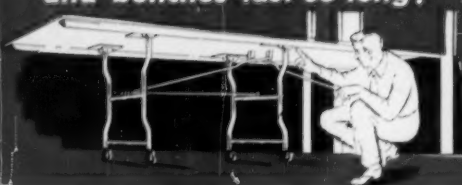
One manufacturer uses plain wood screws to attach the frame, hinges, brackets, etc. to the plywood table and bench tops.



### SCHIEBER

Schieber drills a hole, inserts a threaded bolt with wedged head and expansion anchor which produces an 800 lb. pull test connection.

*It's the things you don't notice every day that make SCHIEBER folding tables and benches last so long!*



Jones Road & 22nd St. School  
South Huntington, L. I., N. Y.  
Architects: Starrett and Van Vleck

## REAL ECONOMY IN SCHOOL CONSTRUCTION DEPENDS ON YOUR AWARENESS OF BOTH!

**1.** Multiple-use-of-space, making one area serve double duty, making all floor space serve as many hours of the day as possible, all are logical methods of reducing school construction costs by eliminating square footage.

**2.** Quality in the equipment you buy is of utmost importance. It must stand up year after year like the first Schieber installation which is still in use after 25 years. In fact, we know of no Schieber unit that has ever worn out.



Representatives in all areas—U. S. & Canada



### A NEW SCHIEBER PRODUCT

Complete new concept. Honeycomb core reduces weight to 1/3. No floor tracks or guides, yet positive floor seal. New surface resists mars, scratches, vandalism. Electric-hydraulic operation.

### SCHIEBER-HAWS FOLDING PARTITIONS

*Should pupils be kept in their own age group . . . or passed on a strict basis of achievement? Since practices vary, let's take a closer look at:*

## The Problem of Pupil Retention

by RALPH E. BILLETT



Mr. Billett is executive head of the Jacksontown, Ohio, Local School.

THE QUESTION OF PUPIL retention in the elementary grades has been a source of much heated discussion and debate. Some claim that the repeater suffers a stigma. Others maintain that it is more cruel to pass a child on to a grade for which he is not ready.

Such argument is justifiable if one reviews the practices of the past and present. The early practice, introduced with the graded school and mass education, was to retain those pupils in the first grade who were unable to read. Under this system all the children were fitted to a prescribed program, and promotion from this grade was based on reading ability. This was the one identifying feature of an ultra-traditional school.

The application of psychology and

child development to education, which began to recognize individual differences, frustration and personality problems, caused changes in the traditional retention practice. The widely publicized principle of accepting the child at his point of development and then working to develop him to his capacity explained the practice of promoting the great majority—and in many cases *all* pupils—regardless of their achievement levels.

#### **4th grade spotlights deficiencies**

This philosophy represented the opposite swing of the pendulum in educational thinking concerning pupil retention. In many situations, the pupils progressed straight through the primary grades; and teachers and administrators assumed the practice to be educationally sound since individual differences were recognized and the curriculum was fitted to the pupil. Here the standard of achievement for each child was his point of progress at the termination of the school year.

Many schools following this procedure found that pupils with low reading achievement on entering the fourth grade were completely lost when confronted by a diversified curriculum requiring a more extensive vocabulary. No doubt this has helped establish the fourth grade as the point where remedial reading would be most profitably offered. It is unquestionably true that reading deficiencies are vividly spotlighted at this grade level where the more advanced subject matter is very often accompanied by higher reading proficiency requirements and greater teacher expectancies.

#### **Accept pupils at achievement level**

Progression through the elementary school by the year-in-each-grade policy emphasizes reading problems since new requirements are encountered in each successive grade. Promoting pupils to maintain them in common-age groups is educationally sound if the school is provided with master teachers, outstanding facilities, small classes and teachers dedicated to the philosophy of pupil acceptance at achievement levels.

However, master teachers, outstanding facilities and the rest are found in few schools. Many schools stress this principle in their written philosophy, but are merely offering it lip service while ignoring its application.

#### **Problem for individual school**

The retention practices described represent extreme views and, undoubtedly, there are many compromise positions in between. However, it is the writer's view that retention is an individual school problem growing from the circumstances existing in the specific school. These circumstances are numerous and diverse—the overall abilities of the elementary faculty, the strengths and weakness of the individual teachers, the established school philosophy, administrative attitudes, community attitudes, case histories of individual pupils, the number of children involved and parental attitude are all factors which bear on retention policy. The wide variance of these factors from one school to another would generally prohibit the application of one policy to all schools.

The retention plans could in some instances vary even within a school at different grade levels. The specific ability of a teacher to handle a slow learner would be a determining factor in a case of this nature. Just as the most effective retention plan is one which is individualized and flexible, the most disastrous type is rigid and fixed—whatever the policy.

#### **Principles proved by practice**

A retention policy, as is the case in the evolution of any administrative policy, is necessarily based upon some underlying principles and basic thoughts concerning the problem. As the worth of the principles are either proved or disproved in practice, a list of this nature is increased or decreased. The following list has been derived through observation and practice in the school of the writer's present affiliation:

1. Each retention case under consideration is individual and unique.

2. Promotion without proper achievement (with other conditions

being more or less normal) can be more damaging and disturbing to the child than retention.

3. Promotion and retention are practices followed to provide the greatest aid to the child.

4. Learning is a complex process with wide variations in individuals, but careful study of pupils offers clues of those most apt to profit by retention.

5. A single condition is infrequently the determining factor for retention or promotion.

6. Retention should be a cooperative effort between the parents and the school.

7. Reading remains a prime consideration in retention practices, since future school success rests primarily with this ability.

8. It is generally better to retain a child in the primary grades than in the upper grades because adjustment is easier there, reinforcement of learning is more pronounced and primary teachers are less pressured by grade standards and can work better with individual differences.

9. Pupils' physical and social characteristics figure prominently in retention decisions.

10. The school's entrance age policy is closely related to retention; generally, the earlier the entrance age the greater the number of retention problems.

11. One year generally appears to be the limit of positive results in retention of a pupil.

12. The values accruing to the greater number of calculated risk retention cases offset the loss of time and progress failure of the fewer cases.

13. Mental capacity and intelligence quotient are important in a retention policy, but the use of a fixed score in determining retention or promotion is impractical.

14. Large classes with lessened opportunities for individual instruction figure largely in the retention problem.

15. A basic check list of facts on each pupil helps teachers and administrators summarize thinking concerning retention decisions.

This last item is particularly im-

# RETENTION CHECK LIST

NAME..... BIRTHDATE..... AGE.....

## FAMILY DATA (circle one)

- |   |   |
|---|---|
| 1. Sex: boy    girl   | 4. Socio-economic position:<br>LL   L   UL   M   UM   U   |
| 2. Ordinal position: 1st<br>2nd   3rd   youngest   only                                   | 5. Birth: premature    normal   |
| 3. Home conditions:<br>broken home    living with relatives<br>living with foster parents | 6. Parents' educational attainment:<br>mother: grammar    h.s.   college<br>father: grammar    h.s.   college |

## HEALTH DATA

- |  | Yes   | No    |
|--|-------|-------|
| 1. Does the school physical examination reveal good health?                      | ..... | ..... |
| 2. Is the pupil oversize for his grade?  | ..... | ..... |
| 3. Is the pupil undersize for his grade?   | ..... | ..... |
| 4. Does the eye test indicate normal vision?                                     | ..... | ..... |
| 5. Does the ear test indicate normal hearing?                                    | ..... | ..... |
| 6. Does the pupil have any speech defects?                                       | ..... | ..... |
| 7. Does the pupil have any visible physical defects?                             | ..... | ..... |
| 8. Is there a history of serious illness or accidents?                           | ..... | ..... |
| 9. Does the child have average muscle control and coordination in work and play? | ..... | ..... |

## SCHOOL DATA

- |   |       |       |
|---|-------|-------|
| 1. Has the pupil been retained previously?                          | ..... | ..... |
| 2. Is the pupil regular in school attendance?                       | ..... | ..... |
| 3. Has the pupil attended several schools?                          | ..... | ..... |
| 4. Have parents shown concern about the pupil's progress in school? | ..... | ..... |

## ACADEMIC DATA

- |  |       |       |
|--|-------|-------|
| 1. Does the pupil read at grade or above present grade level?                                | ..... | ..... |
| 2. Is the pupil of average or above average intelligence according to mental maturity tests? | ..... | ..... |
| 3. Does the child concentrate on his class work?   | ..... | ..... |
| 4. Does the pupil have difficulty following instructions?                                    | ..... | ..... |
| 5. Is the pupil interested in school?  | ..... | ..... |

## SOCIAL DATA

- |  |       |       |
|--|-------|-------|
| 1. Is the pupil a behavior problem?                      | ..... | ..... |
| 2. Is the pupil well adjusted and accepted in the class? | ..... | ..... |
| 3. Does the pupil seek older playmates?                  | ..... | ..... |
| 4. Does the pupil seek younger playmates?                | ..... | ..... |
| 5. Does the pupil prefer "solo" play?                    | ..... | ..... |

portant. The use of a basic check list is valuable in parent conferences; it presents an overview of the problem; and it eliminates decisions based upon insufficient data. Furthermore, it represents a more objective approach to the establishment of sound retention patterns—if, indeed, such patterns are possible. The check list shown on this page was developed in the writer's school and is presented here to offer additional in-

sight into the scope of retention factors.

The problem of pupil retention will assume greater administrative significance as school conditions become as grave as statistics tell us that they will. The specters of larger classes, inadequate facilities and under-trained teachers will intensify the retention quandary. Mounting insistence by the public for standards of achievement in each grade in

reading and fundamental skills will require schools to make a complete appraisal of their retention and promotion practices.

It is time that schools make this analysis to determine if they are following practices based upon ideal principles which may be of very little value in practice or whether their practices are based upon the specific conditions of the school-community.

Every time I see a plane in flight with the revolving light perched on the tail, I am reminded of the source of inspiration for this article.

The inventor of that revolving taillight, my brother-in-law, is a research engineer for United Air Lines; as a pleasant reward for his engineering contribution he received a seven-day, expense-free trip to Hawaii for his wife and himself. This event set the wheels turning in my own mind, and all I could ask was, "Why are outstanding teachers not given some sort of recognition for proficiency in the classroom?" The desire for recognition is a motivating force behind much human endeavor and, again, the teaching profession seems to have lagged behind business and industry in taking some positive action on this score.

The need for information and study on this question became more insistent when I remembered that my brother-in-law had quite a collection of other company awards to his credit. His mantel boasts a gold-plated airplane inscribed: Presented in Recognition of Outstanding Engineering Contributions, Annual Awards Dinner. Three more plaques decorate the walls of his recreation room: one is a safety award received from the Flight Safety Foundation; another is the National Safety Council award for contributing to the United Air Lines safety record; and the third plaque commemorates fifteen years of service with the company.

#### Teachers' walls are bare

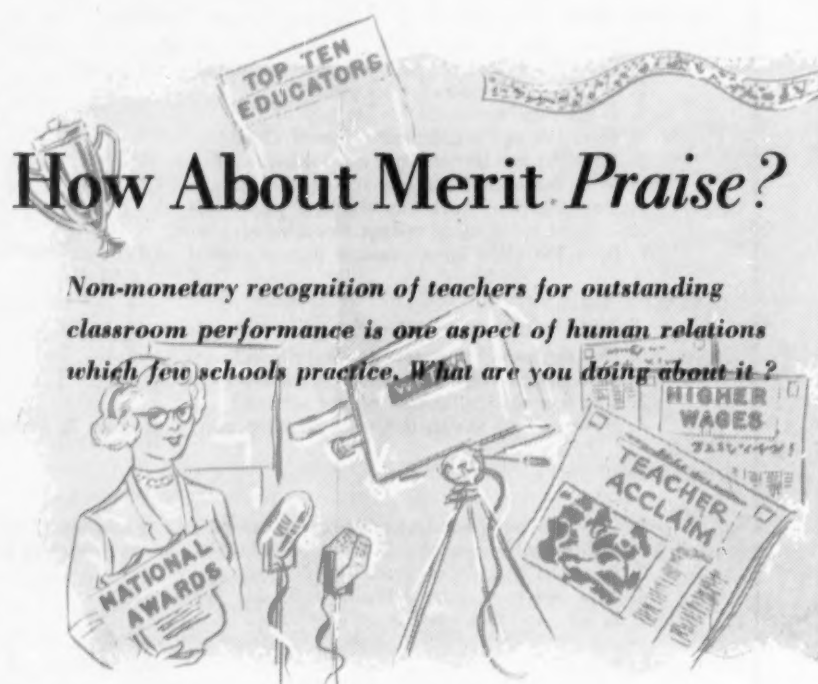
While visiting another brother-in-law in Denver, also a United Air Lines employee, I noticed three plaques which looked strangely familiar. They were exactly like the ones in the recreation room in California. I later learned that whenever United Air Lines receives an award, replicas are made and presented to those employees whom it feels have been instrumental in winning the award. My interest was aroused by this policy which rewarded employees for doing a good job on the job.

I suddenly thought of the teachers'

homes I have visited where the walls were conspicuously bare of any awards or other signs of recognition. I recalled, in particular, a colleague of mine who will soon retire after 36 years of outstanding work. She has influenced thousands of children who have felt the permanent imprint of her kindly, earnest spirit. Her contribution has surely been as significant as the taillight, yet her only reward from her "company" has been a steady stream of students. Perhaps on her retirement, there will be a

tion are merely the expression of company philosophy," explained Mr. York. "What is really important is the fundamental philosophy—the belief that our employees become better employees when they feel their work is appreciated."

Mr. York explained that a "system" of employee recognition is apt to defeat its own purpose, since it tends to become routine and impersonal. "While it is true," he said, "that there is a nation-wide company program of recognition, we are more



*Non-monetary recognition of teachers for outstanding classroom performance is one aspect of human relations which few schools practice. What are you doing about it?*

farewell party, although it seems to me that 36 years is a long time to wait for recognition.

Obviously United Air Lines had a well-defined program for employee recognition. I decided to learn more about it, hoping that perhaps a part of it might be applicable to the teaching profession.

Armed with a barrage of questions about their program, I was naturally surprised to learn from their personnel department representative, Mr. York, that there is no "system" which can explain these tokens of appreciation.

"Expense-free trips, plaques, gifts and pins for length of service—all of these signs of company recogni-

concerned with sensitizing our administrators and supervisors to the importance of employee recognition. They in turn will devise their own ways of expressing appreciation to their subordinates for work well done." This kind of recognition, Mr. York pointed out, is more meaningful simply because it does lack "system" and is therefore more personal and sincere.

#### Commend on-the-job excellence

He went on to describe various other ways administrators have found meaningful in acknowledging employee worth: a letter from a departmental vice president commending an engineer for a fine piece of

work, a news item in the company house organ, a spoken word of commendation, recognition for contributing a usable suggestion, a card to an employee on his birthday or upon the arrival of a baby, or perhaps an orchid letter.

"What's an orchid letter?" I asked.

"Whenever a passenger writes a letter of appreciation commenting upon, say, the courtesy of a stewardess, or the efficient service of a ticket agent, that letter is directed to

employee recognition," he explained, "stems from the president himself."

As I left the personnel office, the multiple number of educational psychology courses required for a teaching or administrative credential came to my mind. United Air Lines executives probably never took Education 101: Educational Psychology. Yet it seemed to me that their personnel policy reflected a better understanding of human nature than the personnel policy of many a public school.

I can hear defendants protesting: "We have an excellent program of recognition. Every year our chamber of commerce sponsors an honorary dinner for our teachers. Annually we hold a spring reception for retiring teachers. And whenever a drama teacher produces a fine play, or the music department gives a concert, or the coach fields a championship team a note of appreciation invariably appears in the superintendent's bulletin and often a news item goes to the papers."

#### Praise outstanding instruction

True, many schools do a fine job of recognizing teachers for this kind of activity, and not only at the local level—items even appear continually in state and national journals praising teachers for outstanding performance. However the recognition is invariably for successful achievement *outside* the classroom. But what about the teacher who, day by day, year by year, is performing his classroom task not only faithfully but unusually well? What does he receive for succeeding in what he is primarily paid to do?

In preparing this article I consulted the *Education Index* to find other articles about recognizing teachers for outstanding classroom accomplishment. I could find none. I thought I was surely mistaken. I asked the librarian for her professional help and she, too, found nothing describing non-monetary programs acknowledging teachers for superior classroom performance. This dearth of literature on the subject indicates just how well notable classroom achievement is recognized!

I am not unaware of the avalanche of articles, speeches and studies made pro and con upon the efficacy of teacher rating. Accurately evaluating the work of each teacher within a school is as difficult as the teacher's own task of evaluating his pupils. The job of ranking each student accurately from one to 35 according to his classroom performance is impossible, but teachers and students alike have little difficulty in recognizing the two or three top pupils in the class. Similarly, an administrator should have little difficulty in identifying his outstanding teachers.

#### Does enthusiasm wane?

The teacher is a part of the human family, contrary to the notions of some. On Saturday when he cuts his lawn or washes his car he looks just like the breadwinner next door. If recognition for meritorious work makes a better pilot or stewardess or research engineer, it should likewise make a better teacher.

When a teacher performs his classroom task faithfully and well year after year without praise or applause, does it quail his enthusiasm for the job? I cannot presume to answer for my fellow teachers but only for myself.

At night as I sit at my desk faced with lessons to prepare or papers to correct, I am often tempted to push the papers aside and turn my attention to writing, for who will know or care whether the papers are corrected (except the children, and thank heaven for their appreciation); but in the writing of an article I am assured of some recognition. In how many untold instances is the interest of teachers siphoned from the classroom into other endeavors where there is greater promise of recognition?

Someday, education will join business and industry in their practice of employee recognition. The job of developing young minds is our investment in the future. We must not overlook any possibility that might insure achievement of this goal—and patting teacher on the back might be one of the means to this end.



by LEE D. FRIDELL

Mr. Fridell teaches English and social studies at a Richmond, California, high school.

one of the company vice presidents. The vice president then writes that employee a letter in which he will quote the passenger's word of appreciation, and in turn express his own."

Mr. York handed me a letter he himself had received. "Here is an example of what I am talking about," he said. The letter was from the vice president in charge of personnel, commending him on a recent promotion.

Before we finished the interview, Mr. York related the part that even the president of the company plays in personally recognizing employees for long years of service or outstanding achievement. "In fact the entire emphasis upon the importance of



*Each pupil in the Tucson Public Schools is given an annual dental examination by the dental hygienist. Findings are recorded on the child's permanent health card by the dental assistant who handles all paper work. The classroom teacher observes the mouth condition of her pupils. Parents sterilize the instruments used.*

## 4-Point Program for Dental Health

by RUTH BUGBEE STARNES

MANY A SCHOOL HEALTH program that provides physical check-ups for youngsters overlooks one of the major causes of ill health—dental disease. Did you know that 98 percent of all elementary school children have some form of dental defect or dental disease? And if uncorrected, these can result in serious diseases—not only of the mouth but of the entire organic system.

Recognizing this, the Tucson Public Schools in cooperation with the

---

Mrs. Starnes is a dental hygienist in the health department of the Tucson, Arizona, Public Schools.

THE SCHOOL EXECUTIVE

Southern Arizona District Dental Society, expanded its health department to include a dental health program. This was in 1942; since then thousands of Tucson youngsters have been given dental examinations, have had dental defects corrected through the program and, most important, have learned some principles of hygiene.

Essentially, the Tucson School's dental health program is one of prevention through dental health education, with emphasis on the early treatment of defects in first permanent molar teeth for all children under the age of nine. The program has to date been very successful in accomplishing its four objectives: annual dental inspection, mouth hygiene instruction, filling of pit and fissure defects and removal of pulp-infected teeth.

#### Annual inspection

This is how our dental health program operates. Each child is given an annual dental inspection, with the simple aid of a mouth mirror and explorer, and the findings are recorded on the child's permanent

health card. The Schools' dental hygienist makes all the preliminary inspections, usually in the nurse's office of the individual schools. Helping her with the inspections are the dental assistant who records the findings and parents who sterilize the instruments. The pupils' teacher also sits with the examiner so that she sees the mouth condition of her pupils and is thus in a better position to know their overall health. This is important for parent and teacher conferences and for the follow-up work with pupils who require dental care.

It takes about twenty minutes to inspect a group of 30 children. The dental assistant does all the mechanical organization and paper work. These include home-notices, appointments, etc. Triplicate lists are made of the children needing various kinds of dental treatment, one for each teacher, one for the school nurse and one for the school dental clinic. Home notice cards are sent to the parents for those children in the fourth, fifth and sixth grades; these read: "Examination of your child's mouth shows dental defects (cavities, etc.) which should be treated

by your dentist as soon as possible."

By a self screening method all children in first, second and third grades, who for any reason could not be treated by a private dentist and if requested by the parents, are given the opportunity to have these dental defects treated in the school dental office. Appointments are given as soon as possible, and a parent or guardian is expected to bring the child to the dental office. The child is not considered "absent" while at the dental office.

The first permanent molar, called "the keystone to the dental arch," is a very important tooth; it erupts behind the baby teeth when the child is about six years old. Too many parents do not understand this; they believe it to be a temporary tooth and neglect to have any reparative work done.

Developmental defects are common in this tooth and is the point where decay begins. This molar is the most important masticating surface in the mouth. When one six-year molar is removed all the other teeth will deviate from their normal relationship. This causes marked interference with

Tucson Public Schools photos



Teachers and mothers, after learning correct technique themselves, teach youngsters to brush properly.



Using a large model of the teeth and a giant toothbrush, the teacher instructs her young pupils in simplified mouth hygiene. Youngsters are given new brushes for home use.

the normal functions of the teeth which in turn brings about many serious diseased conditions—not only of the mouth, but also systemically.

Filling these small cavities can be done quickly, almost painlessly, and economically. The treated child can expect to have better general health. He may be a better student, all because a few cavities in his teeth were filled before he was nine years old. The second permanent molar tooth erupts when the child is twelve years old. The same care is necessary: examination for pit and fissure defects, and filled when needed.

#### Instruction in hygiene

It has been claimed that in preventive medicine nothing is more important than mouth hygiene and preservation of the teeth.

Adult conferences, with two homeroom mothers from each room of the first, second and third grades, are held to discuss the processing of the individual child in mouth hygiene and dental health in general. After the parent instruction period each child is given a new toothbrush and individual instructions in its use. A note is sent home to the parents which reads:

"Today your child was given a

new toothbrush and instructions in the daily use of it. We suggest that you make *daily* inspections of your child's teeth to encourage this very healthful habit which will in turn promote better general health. Brush the teeth (salt and soda is best for a dentifrice) within "split minutes" after every meal, because sugar left in the mouth changes into acids within half an hour at the most. Rinsing the mouth with water *immediately* after eating or drinking sweetened beverages, removes much of the residue before it can be converted into harmful acids. Use a good brush, hard bristles, with a wiggly motion; be sure you contact all tooth surfaces, in between the teeth and around the gum margin."

#### Parent responsibility

The teacher, from her observation point, can integrate the subject throughout the school year. This parent-child classroom contact is invaluable to the education of parent responsibility, not for the child alone, but on a community basis. There is no one pattern for developing a good working relationship between the teacher and parent. We, who are the leaders and instigators in helping parents to recognize their responsi-

bility in child dental health, find their response to the call of being "needed" to help is gratifying.

#### Dental treatment

The removal of pulp infected teeth and diseased roots of teeth is essential as these are sources of infection that can cause many kinds of ill health. Any child in the elementary schools who comes to our attention, either because of toothache or through routine inspection, is listed as an emergency and cleared through the dental office for treatment as soon after notification as possible. Many primary children have abscesses because of a common erroneous belief that the deciduous teeth (baby teeth) need not be filled or treated. This is a serious mistake, and only more concentrated effort toward parent education on the pre-school child will rectify it. A very small percentage of children between the ages of three and six get reparative treatment; consequently our primary children are dentally handicapped even before the eruption of their six-year molars.

This program of "prevention" will show results that are tangible and beneficial, as we follow these children through their first six years of school.

Sixth grade children going into junior high are given a second inspection in the spring. If dental corrections have been made since the fall inspections and they have a clean healthful mouth, they are given a dental health certificate.

The dental section personnel for this program includes half-day services of a dentist and dentist assistant and the full-time services of the dental hygienist and her assistant. Last year alone this staff processed the inspection of more than 17,000 Tucson children.

Since the dental health program has been in operation, we have noted considerable improvement in the youngsters' health each year. In administering this program, we experience the gratifying feeling that we have made a contribution to the better health and happiness of these children.



*the high school diploma:*

## Symbol of What?

by JOHN D. ANDES

**W**HAT DOES a high school diploma signify today? Certainly it is not a guarantee that its possessor has attained a defined and accepted standard of excellence.

The history of the modern high school shows that the diploma was persistently looked upon as a passport to college or as a certificate of equivalent proficiency. Actually, if a person has a high school diploma, you can be sure of about one thing—that he has spent the prescribed amount of time in school.

The idea of awarding a diploma as a symbol of achievement is not inherently bad, but traditional requirements for the traditional sheepskin have stood in the way of progress. The current emphasis in this country on "education for all the people" has come into being without corresponding adjustment in the educational program.

Not many years ago, high school pupils were encouraged to withdraw from school if they were unable to attain fixed standards of academic achievement. Today, the basic objective is to keep youngsters in school through twelve years of public education. Nowhere in the world is there such a wide variety of pupil backgrounds as can be found in our public schools. Our curriculum and entire educational program must constantly be adjusted to these local needs and local problems. As our schools have increasingly accepted the responsibility of furnishing to

Mr. Andes is assistant superintendent in charge of instruction with the Richmond, California, Schools.

each normal youth an education suited particularly to him, it is evident that if the diploma is to have real significance it must be regarded as a standardized certificate of proficiency only up to a point, that it must be individually interpreted and evaluated beyond that.

The meaning of the diploma must center on the completion of a course of study which is in keeping with each normal pupil's aptitudes and needs and up to a proficiency in line with his capacities. According to California's *Framework for Public Education*: "Completion of high school should mean that the graduate has had those basic learning experiences which facilitate immediate adjustment to the responsibilities of adulthood."

The high school diploma should imply that the pupil has learned as much as he can from a program designed to help him become a good citizen and make his maximum contribution to society. Whether the pupil completes a college-preparation course with a satisfactory rating or whether he completes a "practical living" course with a satisfactory rating, he should be awarded the diploma in that recognition. If the diploma cannot serve in this manner it should be abolished and another method devised to give this type of recognition in line with the philosophy expressed by the California *Framework*.

For is it not fairer to the student (and to his prospective employer) to award him a diploma that symbolizes his own particular achievement—achievement that is in line with his basic aptitudes and abilities?

# They Criticize When They Don't Know

*Diagnose the causes of the complaint, and  
apply a good public relations prescription*

by WILLIAM H. POLLARD

**T**O COUNTERACT CRITICISM schools need a true interacting program of public relations—within the school and between the school and the public it serves.

Many parents feel that the school is not doing its job because they do not know just what the school is doing. They know that the football team won or lost. They know that Mrs. Jones was elected PTA president, and they might even know that the seventh grade put on the assembly program.

## Unaware of reasons

They do not, however, know what method their child's teacher is using to teach reading and why she is using that method. They do not know what led up to the seventh grade's assembly program or what the children learned while rehearsing and presenting this particular program. They do not understand why their daughter is in group 3, the Red Bird group or group B; and they probably don't know why Johnny can't go to the store during the noon recess to buy some candy or pick up some thread for mother.

The reader can easily see that these "don't knows" could continue indefinitely. Teachers and administrators should want parents to know

exactly what is taking place inside the school. They might achieve better public relations by:

Encouraging parents to participate in establishing and planning the school curriculum; keeping parents informed of the inside activities and happenings of the school by reports to them, newspaper items, bulletins, pamphlets, parent-teacher conferences, personal and home visits and in other ways that might apply to the local situation; maintaining an open door policy to encourage suggestions and visits; and remembering that the school is financed for the children and that parents want to know what they are getting in return for their investment.

*Let parents know by what method their children are taught to read. Encourage citizens "to participate in establishing and planning the curriculum."*

During the past four or five years there have been many criticisms of public schools. On what do citizens base their criticisms? "Johnny can't read like he should," says the irate parent, "and besides that, why do I have to buy him a white shirt and blue bow tie? I can't afford those just to keep him in the chorus."

"That teacher of Beth's," states another, "she phones today and tells me that the class is going on a field trip tomorrow and she wants me to drive some of the children. Do you think for one minute that she told me where they were going or why or what they were going to look for? She sure didn't. She probably just wants to miss the reading time



Mesa, Arizona, Public Schools

Formerly an elementary school principal in Texas, Mr. Pollard is now enrolled as a graduate student at North Texas State College, preparing to teach in California.

she should spend in the classroom."

In the first instance the parent complained that she was told to buy her boy a shirt and bow tie or he couldn't sing in the chorus. She displayed her resentment toward the school, however, by complaining about the reading program.

Beth's mother was upset because the teacher used the wrong approach. She, too, made a remark indicating the lack of good reading instruction.

### Maintain rapport

Teachers and administrators should realize that they may irritate parents. They forget sometimes that the parent has home responsibilities and home tasks that take primary importance. Most parents will receive requests and even demands from the school with a spirit of cooperation. Others, however, suspect the modern school and its program.

It is wise, then, for the school to maintain rapport by attempting to keep the public wholeheartedly behind the educational policies through a sound program of public relations. Inconsiderate or graceless practices of the school will eventually bring much criticism.

These criticisms may come to the surface in such forms as "anti-progressivism," or anti-experience-

type curriculum campaigns. Although the resentment smoldered over something trivial or non-curricular, the irritation is directed at the school program.

Take stock of your school's relation with its public. How many times have your teachers told their students to bring money to class the next day without consulting the parents? How many times are parents called on for help without actually being allowed to participate in the project? How many parents are "dragged" to meetings through room count or other contests instead of wanting to attend because the program is interesting?

Do your school's answers justify criticism? In some instances and concerning some practices, they may. You recognize, on the other hand, that there are chronic grippers who influence others to a feeling of discontent.

### Let parents participate

If, however, the parents are included in planning sessions, are not irritated by petty school procedures and are well-informed about the school's program, they will defend the school against criticism instead of jumping on the complainants' bandwagon.

Why is criticism leveled at the public schools? We find that there are over 9 million members of the National Congress of Parents and Teachers, and 10,000 citizens' committees are working directly with teachers and administrators. The members of these groups surely enjoy the privilege of airing their views, consulting with school officials and working to give the children of their communities the best possible educational opportunities. Teachers merely have to reach for a phone and most parents are ready to help.

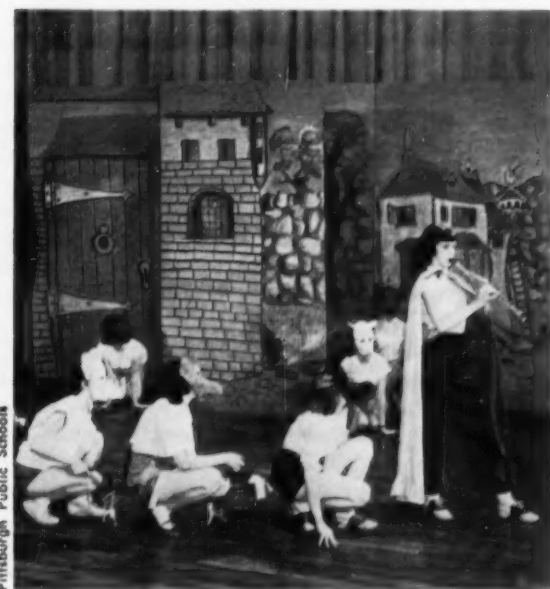
### Critics misunderstand policies

Some of the diatribes come from those parents who are chronic objectors. Most of the criticism, unfortunately, comes from parents who do not understand or who misunderstand what is happening inside the school.

It is the responsibility of the school personnel to keep the public properly informed. Citizens are interested in the school and want to know what is being taught and why.

The remedy lies in thoughtfulness. A little time and effort to comply with the public's desires to understand and greater cooperation with parent groups will reduce criticisms to a minimum.

*Invite parents to rehearsals and performance of assembly programs. Maintain "an open door policy to encourage suggestions and visits."*



Pittsburgh Public Schools



Emporia, Kansas, Schools



## Counsel for Consultants

*A school board consultant shares tested working principles*

by WOODSON W. FISHBACK

Some boards of education, faced with increasingly difficult problems, find it helpful to turn to outside sources for objective guidance. Because of the complexity of modern education, the typical school board member has come to rely more and more on those with special competencies and technical "know-how" in the fields of industry, business and higher education.

Rather recently the term "consultant services" has appeared in professional literature to identify the type of help provided by individuals outside the district's school staff. Many of the consultants are connected with community-minded universities.

The writer's work as a consultant to thirteen public school boards in

southern Illinois between 1952-54 led to the identification of selected working principles and the opportunity to test their validity. Although these principles may not apply equally well for all consultants, certain of the suggestions should prove helpful to other university staff members who may be called upon to serve as consultants for boards of education or other adult groups.

When summoned to discuss problems, it is imperative that the consultant determine the philosophy and attitudes of the board members and chief school officer on such matters as the educative process, the role of board members and the educational outlook of the school administrators. The chances of achieving satisfactory

Mr. Fishback is an associate professor of education at Southern Illinois University, and co-author of a recent book on consultant services.

results are few if the consultant tries to impose changes or attempts to involve board members in growth activities for which they feel no need and are unprepared.

After the problem areas have been determined, the consultant should help to identify the specifics in need of study and solution. Next, the problems are given a priority position in order to systematize the study program. Agreement among board members and administrators is essential at this stage to guarantee an acceptable educational program for the community.

Each board member needs to feel he is an active member of the group, not just a vote. It is basic to the consultant's role to impart this feeling of status and do everything possible to help the board of education and the chief school officer to operate as a team. Team spirit functions best when each board member feels that he is respected and needed to carry out board responsibilities.

#### Stimulate participation

Three factors are fundamental to the promotion of team spirit among school boards and their chief school officers. First is to stimulate active participation on the part of board members. One way of accomplishing this is through a sharing process, best illustrated by special committee activities or the gathering of information for board consideration by individual board members.

A second essential is that the board of education never be played against the central administration. Nothing can be more damaging than a situation which does not honor the importance of each office and those who fill the offices. The wise consultant will maintain a balanced relationship between board members and the chief school officer.

The third factor which has a positive effect on team spirit is recognition of the services of each board member. The consultant, if working over a reasonable period of time, will likely have some opportunities to see that credit is accorded each person for his labors.

Early in the rendering of aid to

boards of education and their chief school officers, the consultant should develop a number of resources, such as reading materials, audio-visual aids, statistical services and specialized personnel. There should be not only a listing of the resource materials and services available but also a policy as to length of time materials can be used, cost to the local district, if any, etc. Boards of education should also be made aware of the resources available from the state office of public instruction and the state and national associations of school boards.

Programs entailing consultative services may get off to a brilliant start but, through lack of appropriate timing and action after the initial impetus, are often short-lived and fail to meet the expectations of the participants. Assuming responsibility for follow-through and follow-up activities is a further obligation of the consultant.

Whether pay for his services is involved or not, the consultant should be careful to keep pledges to boards in terms of time and services set forth in original agreements. It is also important that the consultant keep confidential all things which might lead to misunderstanding or bring embarrassment to those persons he is serving.

Another principle for the consultant is to supply the board of education with indications of progress. If the consultative services are intended to help solve a specific problem or to assist board members and the chief

school officer to alter the educational program, periodic evaluations are necessary. Progress reports can motivate the participants to move confidently into new phases of the program and problem-solving activity.

Periodic evaluations should be looked upon as an integral part of



After determining the board's philosophy, the consultant guides the group toward its accepted goals.

the overall plan of action. Not only are the evaluations worthwhile for the school district participants, but they also provide useful data for the consultant. And to the various participants periodic evaluations can indicate whether the morale of the group is satisfactory for taking next steps in a plan of action; the strengths and weaknesses of the program of action to date; their confidence in the consultant's leadership as well as the extent of progress generally.

Evaluative procedures and checkpoints incorporated into the original plan of action promote confidence of the group in the consultant's leadership and services. As he more and more allows board members to direct their own activities, the consultant becomes the observer and guide.

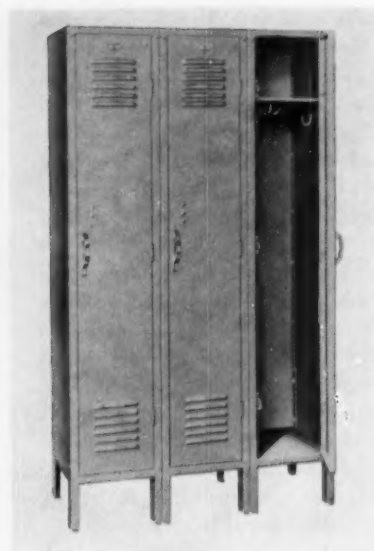
The consultant is then functioning in his proper capacity. He identifies problems with the board members, serves as a resource person who helps them answer questions; he instills in each participant the desire to continue with the study program, steers them to the next phase of work; and, at the right time, he evaluates objectively the progress toward the accepted goals.



Consultants to boards of education work with board members to identify and study problem areas.



*Lockers, as shown here, are incorporated into the architectural plan.*



*Single tier*

# Consider Lockers When You Plan

by FRANK E. HEWENS  
Selvage & Lee  
New York City

SCHOOL LOCKERS, once thought of as necessary evils to be concealed in corners, have come out of hiding to serve schools in more ways than as just receptacles for coats and rubbers.

They are now used as integral parts of walls, as interior design elements (one or another of the standard manufacturers' colors coordinated with the school's color scheme) and as "headquarters" for student comings and goings in educational programs that are increasingly mobile.

## **"Do's and don'ts"**

With its emergence from a wall-flower's role, the school locker ushers in its own collection of "do's and don'ts." Let's round up some of these:

*Do* select the right locker for the purpose in mind—taking due notice whether or not there may be any change in the use or the users. For example, in small schools where children grow up using the same lockers from year to year, lockers just right for first graders may be too tiny for eighth graders.

*Do* take into account the size of books and notebooks that the lockers must accommodate.

*Do* consider whether or not there

is need for ventilated lockers. The shorter the period of each locker's use, the less may be the need for venting.

*Do* consider the flow of traffic within and around the locker area.

*Do* consider the maintenance problem. Does dust accumulate too readily on flat-topped lockers? Is there a tendency for cleaning equipment to scuff the lockers?

*Do* consider the year-round storage problem. Will lockers roomy enough in fair weather be inadequate to hold winter wraps?

*Do* consider location in relation to other utilities.

*Do* consider the hazard of swinging doors when planning locker location.

*Do* consider the choices of locking devices, such as key-padlocks, combination padlocks and flush-type locks without handles.

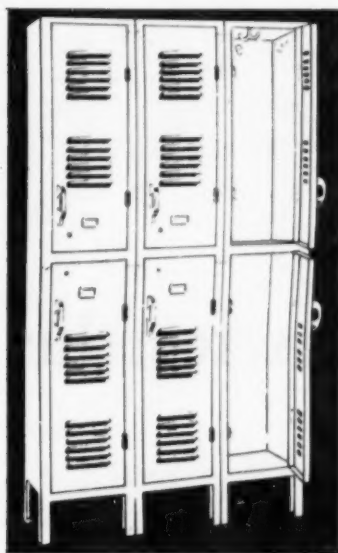
*Do* consider the adequacy of lighting—not only light enough to see the locker numbers but to see inside the lockers as well.

*Do* place lockers on a curb four inches or more off the floor.

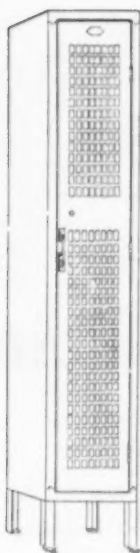
*Don't* permit locker areas to stand out. If they occupy prominent spots, they should complement the area.

*Don't* drop locker bottoms to the floor level because there must be

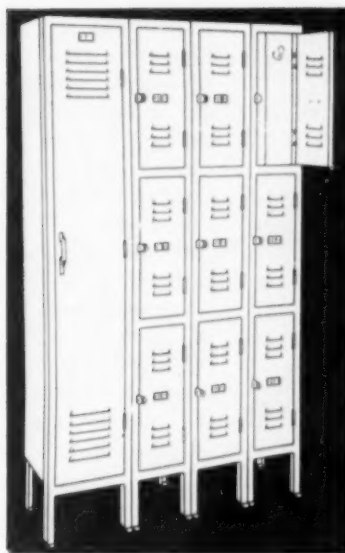
THE SCHOOL EXECUTIVE



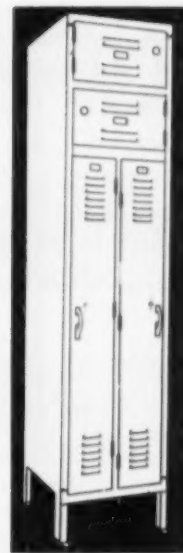
Double tier



Vented



Gymnasium



Two person

room for cleaning and splashing and to clear objects temporarily placed on the floor and because interior design normally does not permit floor-level lockers.

*Don't underequip with lockers.* If a school's expansion potential is 20 percent, there must be 20 percent more lockers than original capacity or definite locations should be earmarked for later additional lockers.

*Don't overequip with lockers*—this is particularly pertinent for schools in warm climates.

*Don't plan so that locker areas become "dead end" loitering spots.*

#### Colors can harmonize

Remember Henry Ford's famous comment about "any color, so long as it's black"? It wasn't too many years ago that schoolmen could choose any color of locker, so long as it was dark green. Now most lockers are available in a great many colors to match or harmonize with any school corridor. One locker manufacturer reports that three colors remain the favorite, however: dark green, beige and gray.

Far from the old concept of lockers as consumers of costly cubic footage, school architects look upon them now as units that can form part of the walls themselves. In no small

degree, this adaptability to storage wall service is the result of improvement in locker design and exterior finish.

Appropriately enough, lockers are often being cast in dual roles—where schools themselves are doing double duty. A good case in point is the Abraham Lincoln Junior High School in Wyandotte, Michigan, designed by Detroit architects Eberle M. Smith Associates. The double life of this school begins in the main corridors, where 1200 lockers are built into the walls so solidly that only classroom doorways and occasional bulletin boards break the tidy phalanx of buff-finished locker doors. The locker units extend along the interior walls of all classrooms; the inner sides of these walls are storage walls for classrooms. (Since neither the interior storage units nor the corridor-facing lockers are load-bearing, steel columns, placed at intervals, support the roof.) Between the tops of lockers and the ceilings is an unbroken span of glass which admits borrowed light into the halls.

The most popular locker among school planners, assuming that there is money enough to give the architect what he wants, is still the single-tier or "one person" locker. The "two person" locker, however, is

emerging as a popular type because it consumes less floor space per individual. These double lockers are particularly expedient in schools with large enrollments.

#### Advances in construction

A comparatively new entrant on the scene, particularly in elementary schools, is a combination coat rack and multiple box locker. Here, the small box lockers frame the coat rack in an arch, so that coats may be hung together while books and hats are placed in individual compartments.

Through the years the size, shape and construction of school lockers have not changed as much as most other school furnishings. After all, a box shape is an efficient design to begin with. The changes have been primarily in construction features. These include such things as three hinges instead of two for full-length doors, rubber cushions for door-locking devices, heavy-gauge steel, extra nuts and bolts with lock washers, and welded collars.

With good care, today's school locker should stand up to constant use for 40 years or more. And this, of course, is one of the principal reasons why you should choose your locker system carefully when you plan your school.

Organize school for work  
with and through people

Transmit news and  
views to all levels

Keep your door "open"

Explain "why"

Avoid hasty decisions

Make promises realistic

Offer help with  
assigned tasks

Recognize merit

Be truthful

Take personal inventory

## Pointers for the

*If you are looking for an abbreviated edition of helpful hints for administering your school, the ten tips offered here might just be the answer*

ALTHOUGH personal experience has long been hailed as the best teacher, there are many instances where outside help—a useful hint from one source, a valuable gleaning from another—may contribute to the principal's "How to Succeed" book. Life simply is not long enough to learn all one needs to know about being a good principal through the media of personal experience.

The wise administrator soon realizes that the infinite number of possible situations demands a preparedness of the sort one can get only from capitalizing on the experience of others. With this thought in mind, I hope the ten commandments I have been guided by in executing my job will help you in yours.

1—*Organize your school so that you work with and through people:*

Running a school is a responsibility you share with other people. How well you coordinate the staff activity, define responsibility and authority and foster congenial human relationships will make the difference between a successfully administered school and one riddled by all sorts of tensions and dissensions. Primarily this means recog-

by HARMON V. WADE

Mr. Wade is director of elementary education in the Burnt Hill-Ballston Lake Central School, Burnt Hills, New York.

# Principal

nizing the importance and value of each individual as a person and then encouraging his creativeness and initiative. When changes or corrections are necessary, it is important that you first consult the person involved. Nothing is more damaging to a teacher's morale than to have changes concerning him or his class effected without first having the matter discussed with him.

## 2—Keep your lines of communication open—up and down:

There are very few things that teachers or the superintendent find more aggravating than learning, at the local drug store, something which affects them or their school, and about which you failed to inform them previously. Transmitting information to your staff, the superintendent and the board of education is basic to your job, and should have top priority as soon as the material can be released. Such an approach develops and maintains a friendly, non-restrictive atmosphere where a free and easy two-way interchange of information is the rule rather than the exception.

## 3—Be approachable and available:

Closely related to the above thought is your availability to your staff, your students and their parents.

They should feel free and welcome to consult you on matters of mutual interest. Only genuine interest on your part, *not* condescension or artificial friendliness, can encourage this feeling. This involves person-to-person contact and means you must circulate within your school and community. Retreating to your inner sanctum upon arriving at school or hiding behind an avalanche of paper work are excellent ways to discourage people from seeing you. Remember, seeing you should be a simple task, and part of your job is scheduling your time so that it is.

## 4—Take time to explain "why":

The American people have been called the most inquisitive people on earth, and rightly so. They always want to know the reasons behind a decision, and no one will dispute that they have a right to know. Taking time out to explain "why" is a must. A sincere, well-thought-out explanation will do more, public-relations-wise, than all of the handshaking and smiles which mask stalling in many cases. Such a small effort will pay big returns!

## 5—Avoid hasty decisions:

Every administrator knows that decision-making ability is the essential quality in carrying out his job. Some individuals have been endowed with an inner powerhouse of the psychic qualities that make decisions relatively easy for them; others (and the majority falls in this category) must take time and much soul searching before they finally reach a decision.

The final decision should be the result of a conscientious analysis and evaluation of facts with the best interest of the majority first and foremost. Once you make it, stay with it—unless it was wrong to begin with. Hasty decision making, for the sake of deciding, often leads to loss of prestige and popularity.

## 6—Don't promise anything except an honest effort:

Resist the pitfall of making promises. However well-meant the promises may be, they are many times dependent on the actions of others and are difficult to fulfill. Here is

the best example of hasty decision making!

## 7—Assigning tasks to people is not enough—they need help:

As the principal of a school, you must oversee the general operation of the school. Among other things, this requires the supervision and direction of your staff. The kind of supervision I am suggesting emphasizes a service function to your associates rather than a checking-up type of supervision. A new teacher without orientation or guidance or a janitor without a work schedule indicate weakness at the top.

## 8—Acknowledge the accomplishments of others:

Few tasks succeed through the efforts of one person alone—they generally come about through cooperation and group effort. Never speak about them in terms of yourself, but always in reference to the whole group. Where individual excellence deserves recognition, by all means give credit where credit is due.

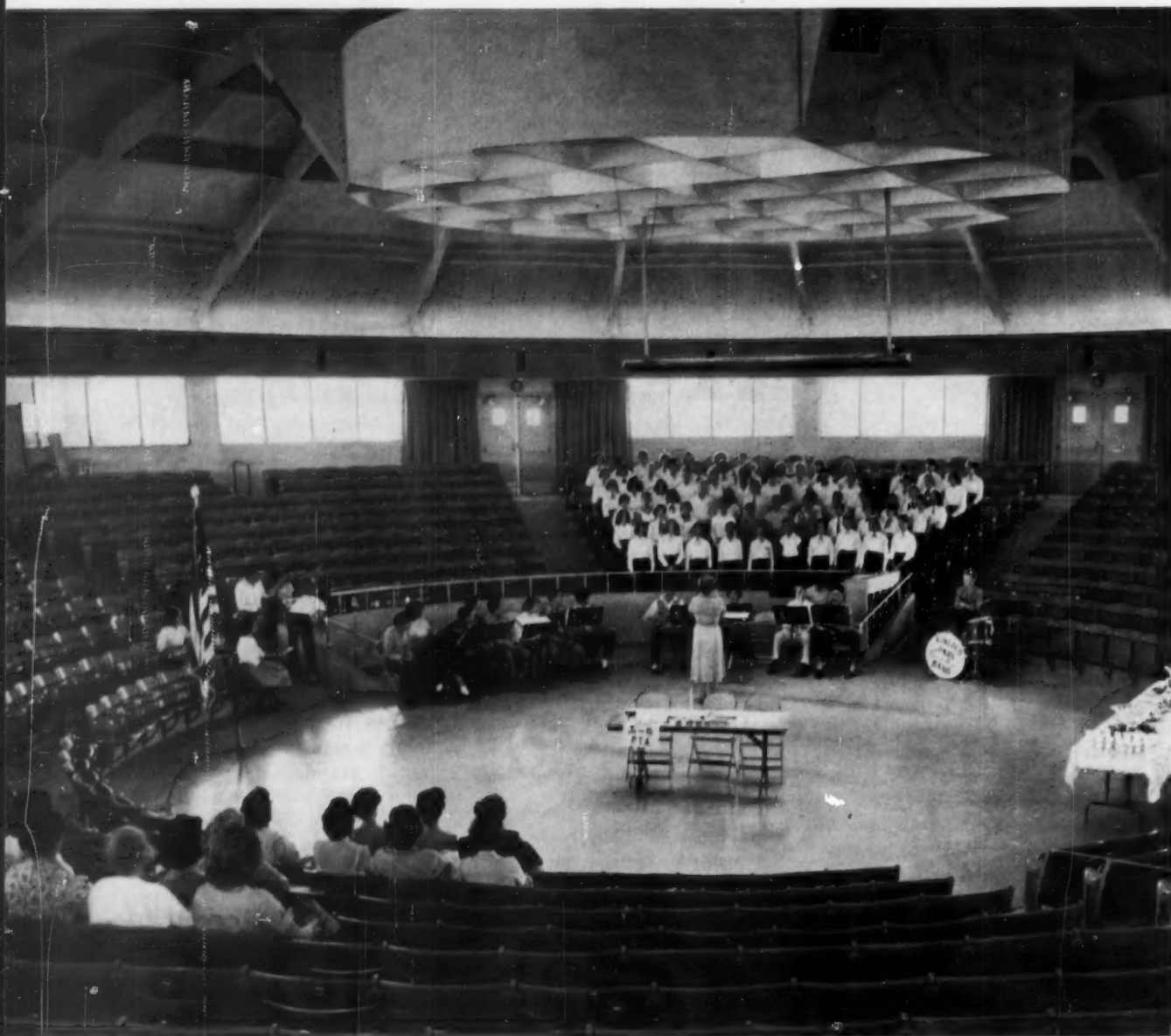
## 9—Be truthful:

In any position of leadership, this trait is essential—half truths, subterfuges and evasive answers will catch up with you eventually. Even if people do not agree with what you say, they will respect you if you speak sincerely and from honest conviction. Gaining trust and confidence is a short cut to a wholesome administration.

## 10—Occasionally take personal inventory:

Check your attitude to your job, your associates and your boss. Quite often you will find it needs a face lifting, and what has seemed to be someone else's problem might, in reality, be your own.

As a last word, let us remember that practicing what you preach is the crux of this message. Just as a fine set of brushes does not make a good artist, or a spanking new car a good driver, so a principal equipped with a brain full of theory does not make a good administrator! You must apply what you know at the right time and right place with objectivity and alertness. "Ay, there's the rub!"



## We Bet on a Ring Theater

*It seats the entire enrollment and the children love it, but we discovered pitfalls, too, when this Miami junior high school's circular auditorium was put into use*



**A**N AUDITORIUM for a junior high school, planned within a limited budget, is typically geared to seat about half the student body. And it was along these lines that we were thinking during the preliminary planning of the Kinloch Park Junior High School in Miami, which was being designed for an enrollment of 1200 children in grades 7-9.

As the architect, the principal and I studied the preliminary sketches for the school, we bemoaned the fact that with a traditionally-shaped auditorium we could seat only 600 youngsters at a time. Certainly it would be more desirable, for purposes of "togetherness," to be able to assemble all of the children, yet we could not afford to put a \$250,000 auditorium into this junior high.

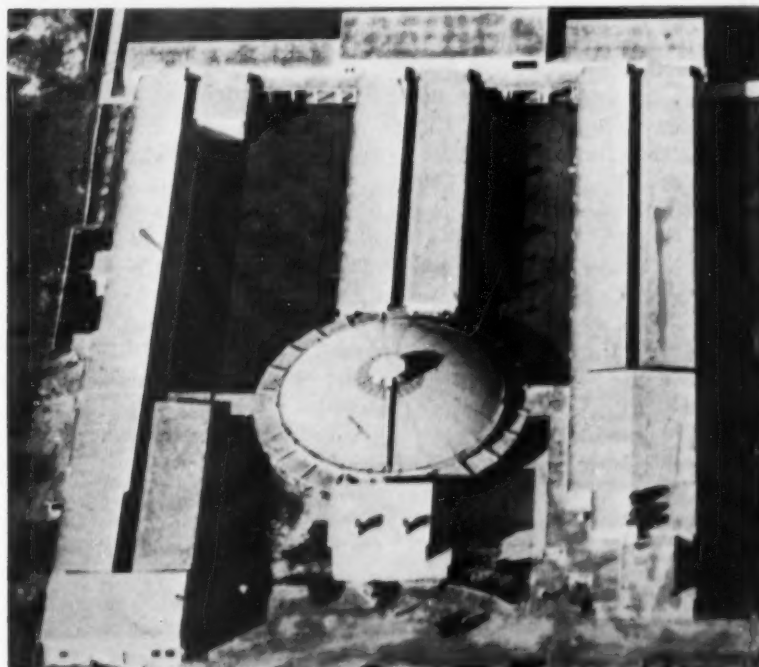
About the time when this problem was at the back of our minds, a state education department member and I attended a play which was being produced in a local tent ring theater. During intermission we found that the same notion had occurred to both

of us, and during the balance of the performance we observed more than the denouement. We noticed that there were over 1250 persons in the audience and yet none was further than 50 feet from the stage, and that though some of the actors had their backs to us when they spoke we had no difficulty in hearing them, and, furthermore, that the players seemed in no way disturbed by the fact that they were surrounded by their audience.

#### First ring in secondary schools

Then we began thinking seriously of such an assembly arrangement for our new school. The more we considered it, the more interesting the idea became. Finally we set down the advantages and disadvantages, and the result looked to us like a good thing to try. I then searched the available literature and could find no junior high school in the United States where such a ring theater was in use, though there were a number in colleges.

*Below is an aerial view of Kinloch Park Junior High School, Miami. As designed by Florida architect William H. Merriam, classroom and administration buildings radiate from the circular auditorium. The theater's ring plan is practical; performing groups can remain in their seats, yet be "on stage," spotlighted.*



by JAMES E. GARLAND

Dr. Garland is director of schoolhouse planning with the Dade County Board of Public Instruction, Miami, Florida.

We therefore presented the idea to the principal and the architect. The latter was particularly enthusiastic and began making sketches of a school which could use to best advantage such an assembly shape.

When the principal examined this solution to his problem of wanting to assemble all the children—with the limitation that the ring theater could cost no more than a regular auditorium with 600 seats—he took the whole problem back to his teachers and with them went over it very carefully. The question they put to themselves was this: Are the advantages of being able to assemble the entire student body worth the disadvantages of not having a conventional (and therefore familiar) stage? The teachers agreed that we should try this new idea. And thus the circular auditorium was built.

#### Students love new auditorium

Since the ring theater has been in operation our discussions and studies of it have been most interesting. Is it a success? From my observations, I would have to say that the children love it, but that the teachers do not.

The students love it because every child is on stage to every other child (something of a distraction to the performers, admittedly). The pattern of movement and color, which is essentially the children themselves, is most interesting as one looks across to the opposite side of the ring. It is a pageantry type of assembly hall rather than one for plays with conventional sets. I am convinced that as the teachers become more accustomed to working in this theater, they will better perceive its advantages.

Further, we discovered, much to our consternation, that the voices of the children were not strong enough to be heard well except by that portion of the audience directly in front of them. We have done considerable study and work to solve this acoustical problem. However, as we pointed out to the principal, the 600 people who sit in front of the performer can see and hear as well as they would in a conventional auditorium, and the other 600 seats

could be left empty except when circus-type programs are presented.

One other advantage of this ring is that the band and glee club can remain in their regular assigned seats to perform; there is no shuffling about to get on and off the stage. The complete stage is available and yet the glee club and band are on stage merely by playing and singing from where they sit normally.

I am convinced that the teachers were dismayed when they first saw this completed project. (It is one thing to talk with floor plans and sketches and quite another to walk into a newly constructed space.) None of the concepts which the teachers had been taught in producing a play on a "picture" stage would work; conventional scenery would not work. A new method of handling mass stage activity had to be developed.

Children themselves, we found, are most interesting to children. As a result, a ring theater allows more competition between the audience and the performer; the movement of children behind the speaker is distracting to those children in front of him. And, of course, it is a trial to some speakers to address a group that completely surrounds them. Many adults are not able to overcome the idea that people can see behind their ears.

#### Aids development of poise

By the same token, however, such experience is beneficial in developing a child's ease in talking and gesturing before a large group. Certainly when a child can stand in the middle of this ring stage and give a good account of himself, he has come of age insofar as stage presence is concerned.

All in all, we feel that we have gained, although we surrendered specific desirable requirements. We feel in general that the ring theater was a good bet. However, I believe that about 950 should be the maximum number of seats in a theater of this shape. This would give it a further intimacy which would make it even more workable as an assembly and entertainment space.

## Creativity in School Planning

by DONALD L. ESSEX

A SCHOOL BUILDING has no reason for existing per se. It is not an end in itself. It certainly is not a place just to store children. It exists solely to house a given educational program. It need not look like what we traditionally think of as "school."

We start, or should start, on the theory that in school building design we have never reached a level of satisfactory performance. Our last building may be good, but the next one will be better. We need architects who constantly seek new solutions. There is no virtue in doing something the way we did it before. Neither is there justification in doing something different just for the sake of difference.

So few of us are creative. Those who are blessed with creativeness should be encouraged to use their God-given talent in the continuous search for perfection. The rest of us should not imitate unless we know why. Imitation should not be blind.

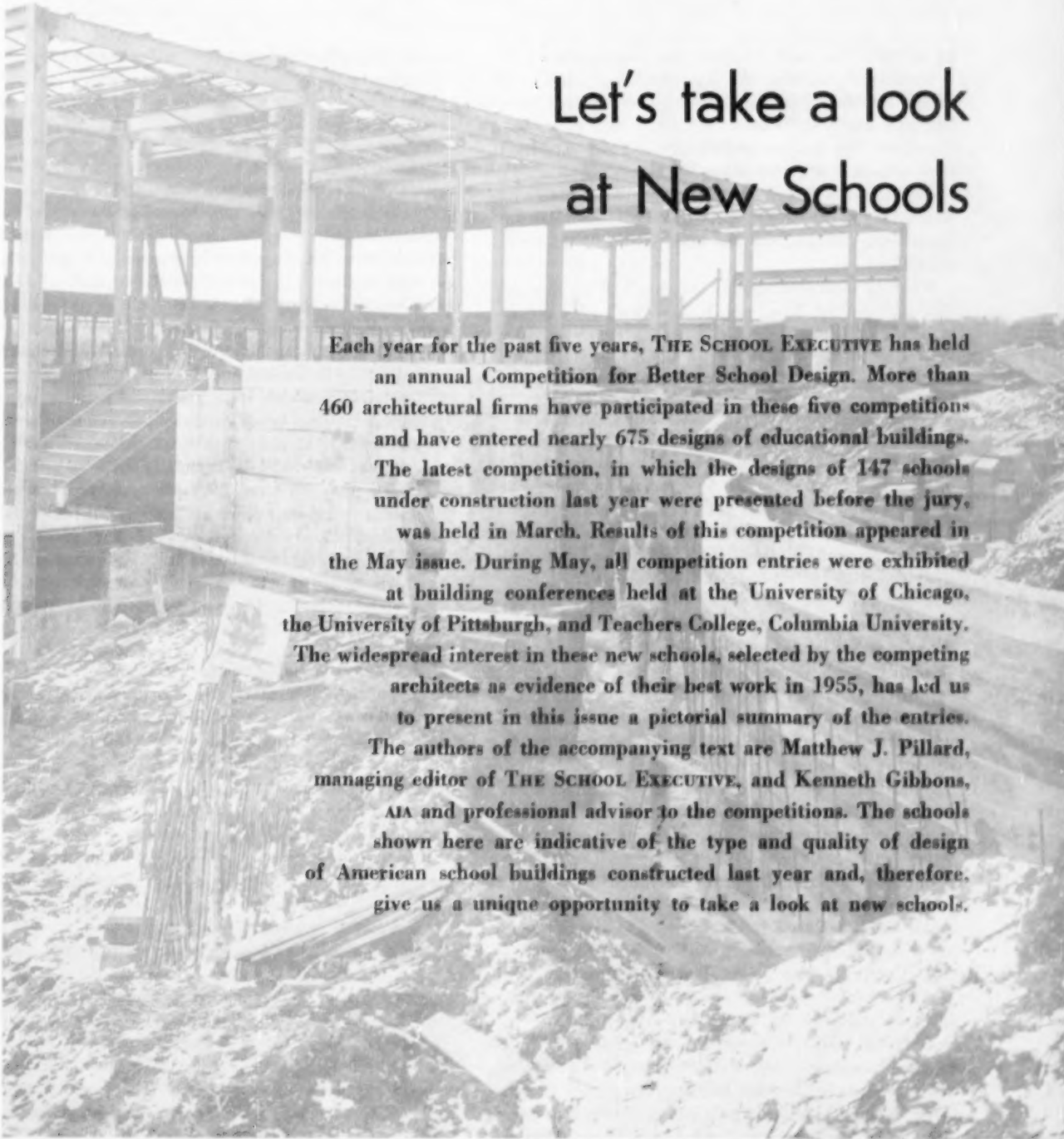
Those who cannot create (that includes most of us) should be studying constantly the products of the creative planners, "shaking down" their ideas, debating, questioning, criticizing. Let the dreamers dream. Their dreams are needed.

---

Dr. Essex is director of the Division of School Buildings and Grounds, State Education Department, Albany, New York.

**planning section**

## Let's take a look at New Schools



Each year for the past five years, **THE SCHOOL EXECUTIVE** has held an annual Competition for Better School Design. More than 460 architectural firms have participated in these five competitions and have entered nearly 675 designs of educational buildings. The latest competition, in which the designs of 147 schools under construction last year were presented before the jury, was held in March. Results of this competition appeared in the May issue. During May, all competition entries were exhibited at building conferences held at the University of Chicago, the University of Pittsburgh, and Teachers College, Columbia University. The widespread interest in these new schools, selected by the competing architects as evidence of their best work in 1955, has led us to present in this issue a pictorial summary of the entries. The authors of the accompanying text are Matthew J. Pillard, managing editor of **THE SCHOOL EXECUTIVE**, and Kenneth Gibbons, AIA and professional advisor to the competitions. The schools shown here are indicative of the type and quality of design of American school buildings constructed last year and, therefore, give us a unique opportunity to take a look at new schools.

## Let's take a look at new schools

by MATTHEW J. PILLARD and KENNETH GIBBONS

**I**N AN EFFORT to meet the apparently insatiable need for educational facilities, the construction of school and college buildings has been breaking records each year. Last year nearly 9250 school buildings were under construction. The designs of 147 of these new buildings were submitted to THE SCHOOL EXECUTIVE's fifth annual Competition for Better School Design. (For an account of the judging, the jury's statement and descriptions of the winning designs, see the May SCHOOL EXECUTIVE, page 45.)

What do these new schools look like? What new design solutions are being tried? A review of these competition entries would appear to give us a representative look at our new schools. When viewed in relation to those built in previous years, the design features observed in the schools built in 1955 may suggest some trends.

*Utilizing the site:* A surprisingly large number of new school buildings are on good sites. In contrast to what previous competition juries had found, an impressive number of new school sites have an abundance of natural beauty and charm. Whatever may be the reasons, school boards apparently are acquiring sites of adequate dimensions and with natural features which lend well to beautiful development.

A few designs show ingenious planning to provide for outdoor activities—recreational as well as educational—such as open-air theaters, scouting areas, nature trails, garden plots and areas for art work. Further use of the out-of-doors includes open courtyards and patios, covered walkways, and play areas and porches adjacent to kindergarten and primary grade classrooms.

A number of elementary schools provide direct egress from the classroom to the outdoors. In addition to the obvious safety advantages, such planning allows a class group to move out in nice weather for such activities as reading, dramatics and nature observations.

While outdoor educational facilities appear more commonly in elementary schools, a good number of secondary schools show promising provisions for outdoor activities. Courtyards for informal group meetings, shaded places with benches, where youngsters may sit to read or just talk, and outdoor theaters showed up in high school designs. As might be expected, however, the most common outdoor provisions are still primarily for recreation, physical education and bus loading.

To be sure, the typical site is still mediocre. But many sites appear to show increasing evidence of care in selec-

tion and ingenuity in development with the result that the site unites with the school building to become an integrated learning center which children and youth find attractive and stimulating.

*Solving a site problem:* Site problems often determine not only cost but design possibilities as well. The investment in good sites pays off, educationally as well as architecturally. But the architect does not always influence site selection. Sooner or later a choice is made and he must produce a design for the site regardless of the problem. Whatever the site characteristics, to the creative architect they represent a challenge to good design; to a non-creative architect they simply represent obstacles he finds difficulty in overcoming.

Many sites, particularly in urban centers and, unfortunately, increasingly so in mushrooming suburban areas, are restricted in size. In such cases, the architecture is understandably forced into vertical lines.

Though the one-story plan continues to predominate, interesting varied-level schools are appearing which follow the contours of the site. A number of architects have cooperated with an irregular or rolling site and, rather than overwork the bulldozer, have produced split-level plans, bus-loading underpasses, natural amphitheaters and the like.

*Separating the building components:* A look at exterior layouts of both elementary and secondary schools shows the break away from the traditional "box" to a separation of building units on a site. Variations include campus plans, finger plans and clusters. Expressions of the school-within-a-school appear in other irregular patterns where individual units are detached or partially connected.

Many of the elementary schools show clusters of two to four classrooms, each cluster housing youngsters of a like age. A multi-purpose room is frequently incorporated in each cluster, though some schools provide a larger separate facility to serve the entire school for a variety of activities.

Separation by age group appears in a Texas junior high school in which the seventh, eighth and ninth graders are housed in separate fingers, each with its own dining and indoor recreation area. More common separation of components found in high schools, however, is by activity. Separate facilities such as the gymnasium, auditorium, library, classroom wings and shops buildings

are frequently connected by enclosed corridors and grouped around a courtyard.

*Departure from rectangular forms:* The variety of geometrical patterns found in these new school designs suggests a tendency to depart from the traditional rectangular forms. Plant outlines are frequently irregular and angular. Curvilinear shapes appear—though in some cases more for the sake of design than function. Examples include fan-shaped and even circular auditoriums and cafeterias, classroom clusters enclosed in a circle and a wing of classrooms describing an arc along a single-loaded corridor.

Despite increasing deviations in shape, right angles, squares and rectangles still predominate.

*Providing for expansion:* Many of the new schools are designed with the expectation of future growth and expansion. The presence of dotted appendages on a plan, representing future additions, sometimes obscures a serious problem, especially affecting secondary schools. Must the design's completion, set for some future date, require educational sacrifices on the part of the enrollment having access to only the initial building components?

When a comprehensive plant is to be built in stages, it should be functional at each stage in order to afford a complete educational program. This challenge is likely to be met effectively only when architects are able to design the overall plan. Difficulty usually arises when detailed design is limited to initial components and only vague outlines indicate expansion.

Another kind of problem stems from the unpredictability of school population. Some solutions provide for small neighborhood schools designed for ultimate resalability as residences. In such cases serious compromises seem to be necessary at the expense of education. Apparently there is an urgent need in many communities for good demountable units, educationally adequate, for situations requiring temporary solutions.

*Building with glass:* Generous use of glass is found in the new schools, not only in exterior walls overlooking a campus and courtyard but also inside the buildings. Libraries, administrative offices and areas adjacent to vestibules frequently are screened by glass walls.

*Solving the lighting problem:* Solutions to the problems of lighting and light control are not new, but the ideas developed in recent years are appearing more frequently. The use of such devices as exterior louvers, bubble lighting, plastic sky domes, bilateral lighting and recessed and diffused lighting fixtures is increasingly found. Architects are apparently more and more aware of the need for uniform lighting and light control. An automatic light cell appears in several of the new schools by which daylight and artificial light are automatically adjusted to maintain uniform classroom brightness.

*Designing a functional classroom:* Elementary schools, more so than secondary schools, appear frequently with irregularly shaped classrooms—L-shaped, hexagonal or curved. Classrooms in several of the schools have green-

houses or nature study areas in a projecting bay window. Kindergartens, generally about half again as large as the classrooms, show that some attention is being given to provide home-like settings for these young tots.

Few departures in secondary school classrooms were noted. One such exception, in a school in Texas, provides three walls—the classrooms are separated from the corridor by chest-high open-shelf bookcases.

*Designing for multiple use:* It is still common to find large spaces being called upon to perform several functions. For obvious reasons of economy, one large area is frequently designed to be used as auditorium, gymnasium and cafeteria.

*Increasing the corridor's function:* The use of corridor space for more purposes than mere circulation appears in the new schools. Many designs show that passageways are also used as auxiliary classroom space, for group meeting space, for displays and exhibits as well as for the more common storage and locker space. A few schools made the logical provision for benches along the corridors.

*Providing "a quiet place":* A particularly noteworthy trend is the increase of such spaces as lounges, commons, spacious and attractively furnished lobbies and teachers' rooms. Secondary schools particularly seemed to be paying more heed to young people's need for an intimate and attractive space for small group projects, committee work and just socializing.

*The identifying fillip:* In general, the competition jury found that the designs of better buildings consistently recognize that the buildings are for human beings. Jurors particularly lauded the use of decorative arts to enhance design and stimulate the imagination of the occupants. Examples of this appeared on the exterior of buildings as well as within. Several schools sported an identifying touch or insignia near the main entrance. Others incorporated colorful tile murals into the building façade.

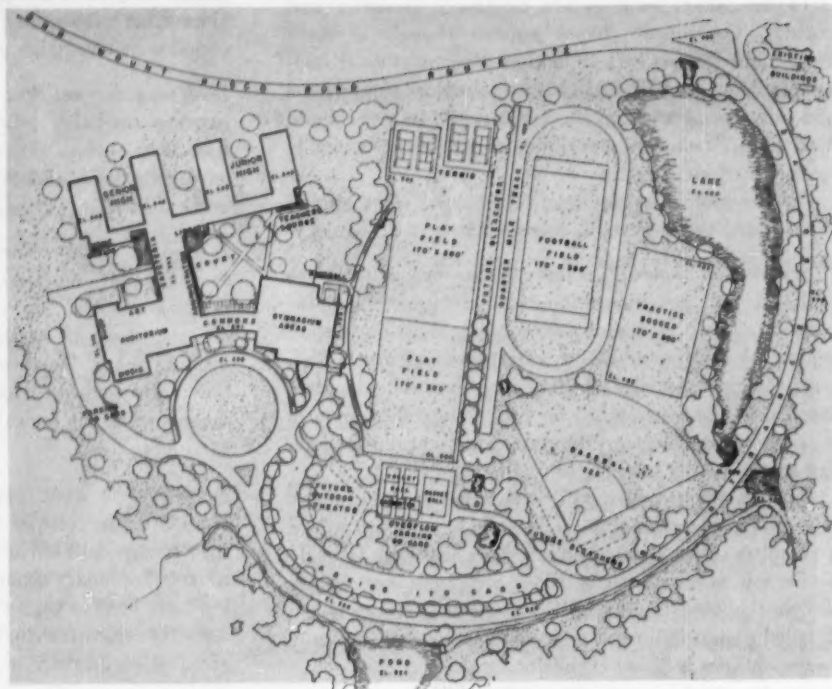
Despite the many variations in new school plant designs, it is clear that budgetary considerations constitute a major problem facing school planners. However, the great range of design treatments among schools of comparable cost testifies that ingenuity rather than standardization is the most effective measure for meeting financial limitations.

New problems follow close upon the heel of new design solutions. For example, the separation of building elements has revealed the problem of a cluttered, or at least non-unified, appearance. And many of the old bugaboos are still with us—the pressure from some community groups for conventional or "safe" designs, the problem of inadequate funds, and the urgency of the need which rules out time for adequate educational planning.

However, as the following 28 pages illustrate, the future of school architecture is attractively promising. As a high school girl said when she saw a recent exhibit of these competition-entry designs, "Gee, these schools are beautiful. They're not like schools at all!"

how new schools

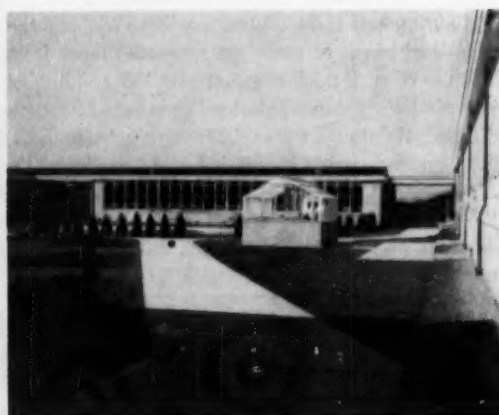
## utilize the site



Above: 155-acre site in newly-formed suburban district is endowed with beautiful natural features—woods, rock formations, streams and ponds. Note provision for outdoor theater. (Fox Lane jr.-sr. High School, Bedford, N.Y.; designed by Moore & Hutchins).

Below left: Complex problem of circulation for 1800-enrollment high school was solved by unusual arrangement of raised classroom wing and central court. This interior court opens to main access drive and serves as outdoor social area in favorable weather. (La Salle High School, Niagara Falls, N.Y.; designed by Sargent-Webster-Crenshaw & Folley with Cannon, Thiele, Betz & Cannon).

Below right: 1200-student high school is designed for maximum use of entire site with outdoor instructional and recreational areas. Central open court, for example, has a greenhouse. (Central Dauphin High School, Harrisburg, Pa.; designed by Edmund Geo. Good, Jr.).

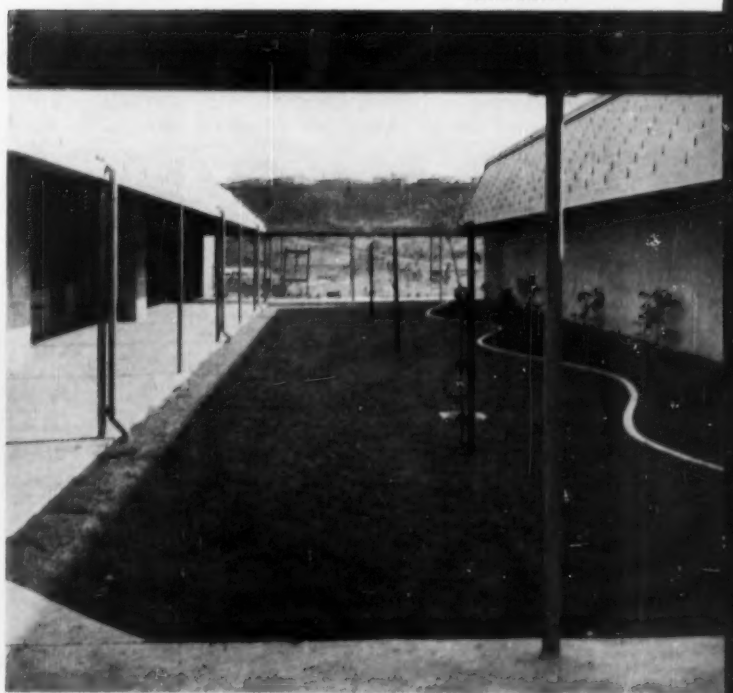




Julius Shulman

Above: Court at entrance of this elementary school has inviting planting box and seating. (William Penn School, Bakersfield, Cal.; designed by Whitney Biggar). Right: Open grass court between wings of this elementary school (Repetto School, Monterey, Cal.; by A. C. Zimmerman with Topp & Birsak). Below: Paved work and play areas off classrooms (Aurelia Pennekamp Elementary School, Manhattan Beach, Cal.; by Daniel, Mann, Johnson & Mendenhall).

Kassler Studios



Olson Spencer



how new schools

## solve a site problem



Lawrence S. Williams

Above: Rolling site was used to advantage for this bus loading underpass. (Conestoga Sr. High School, Berwyn, Pa.; designed by Howell Lewis Shay & Assoc.). Right: Clusters of multi-story buildings, for adult group use, on a 7-acre site. (Continuing Education Center, U. of Ga., Athens; designed by Stevens & Wilkinson). Below: Two-story building adapts to steeply sloping site yet allows all classrooms direct contact with their respective play areas. (Easterly Parkway School, State College, Pa.; by A. William Hajjar).





Molitor

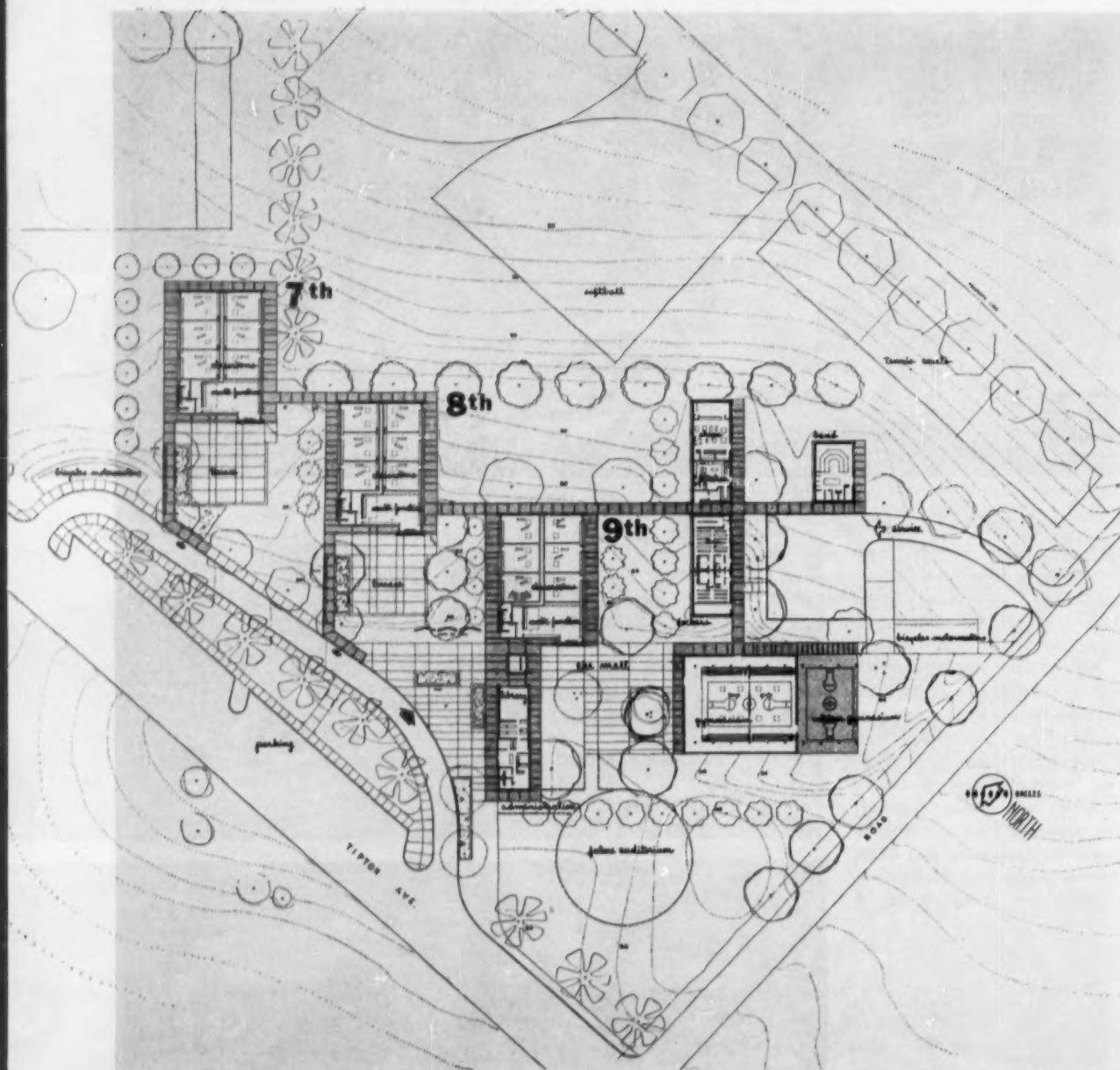
Watson M. Alexander

Above: Adaptation to rugged, irregular site provides a lower level for outdoor and covered play. (Olivia Street Elementary School, Port Chester, N.Y.; designed by Sherwood, Mills & Smith). Right: Rolling site dictated the shape of this building and its three split-floor levels. Each classroom has direct access to its outside area. (South East Lake School, Birmingham, Ala.; by Warren, Knight & Davis). Below right: Two 2-story buildings separate academic from arts-athletics areas on a congested city site. (General Sherman Junior High School, Lancaster, Ohio; by Joseph Baker & Assoc.).

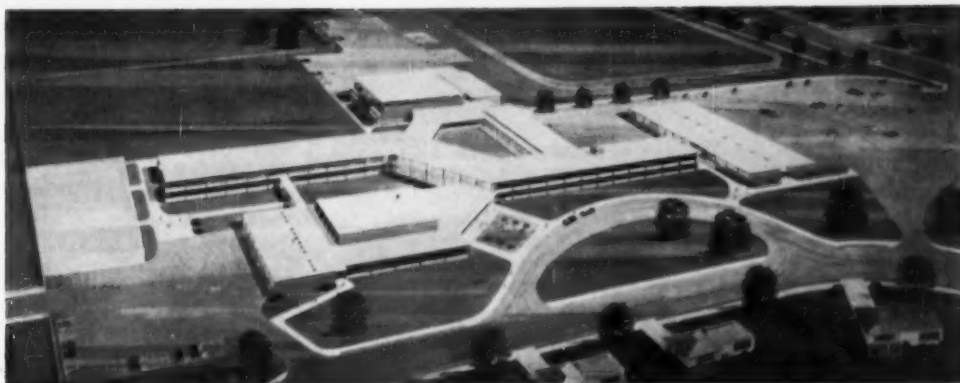


how new schools

## separate building components



The three class groups, each with a separate program, are separated in this decentralized junior high school. Each group has its own multi-use area which serves for dining. (J. R. Moore Junior High School, Tyler, Texas; designed by Caudill-Rowlett-Scott, Bruce & Russell).

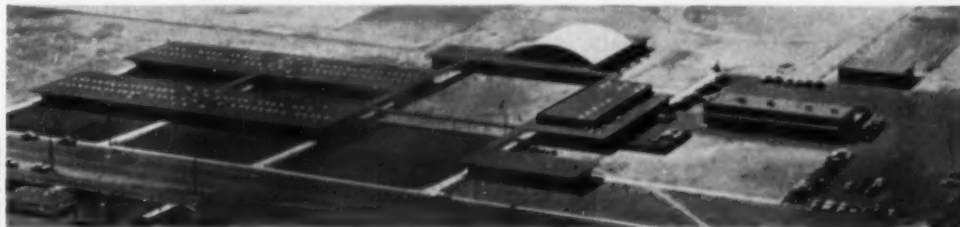


Hedrich-Blessing



Wells-Fogliano

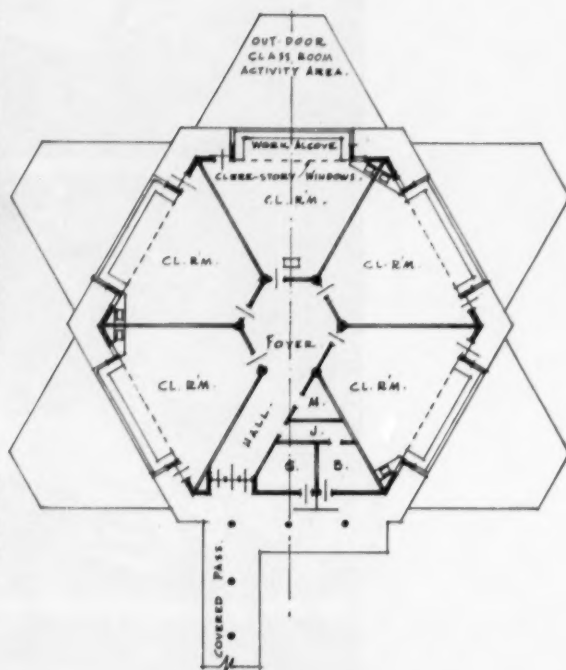
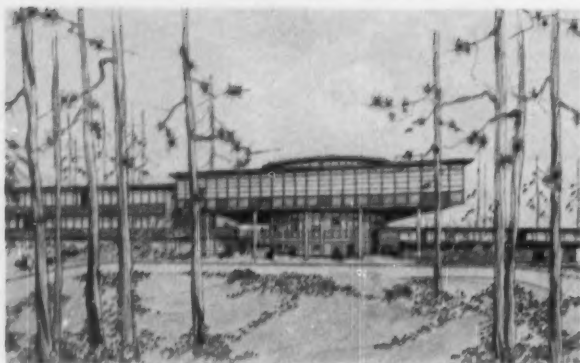
Top: 1500 junior and 1000 senior students are separated in opposite ends of this plant, each group having convenient and separate access to common-use facilities (Northern Jr-Sr High School, East Meadow, N.Y.; by Frederic P. Wiedersum Assoc.). Second from top: High school for 2000 pupils in grades 9-10 spreads out on a 50-acre site (Lyons Township High School, Western Springs, Ill.; by Perkins & Will). Above: Grades 5-8 are housed in finger-plan school; library and homemaking, shop and music areas and 3 classroom wings are connected by covered walks (Parkmead Upper Grade School, Walnut Creek, Cal.; by Schmidts, Hardman & Wong). Below: Classroom wings, shops and multi-use buildings are connected by open corridors in this single-level high school (Washington High School, Phoenix, Ariz.; by Edward L. Varney Assoc.).



Stuart Weiner

how new schools

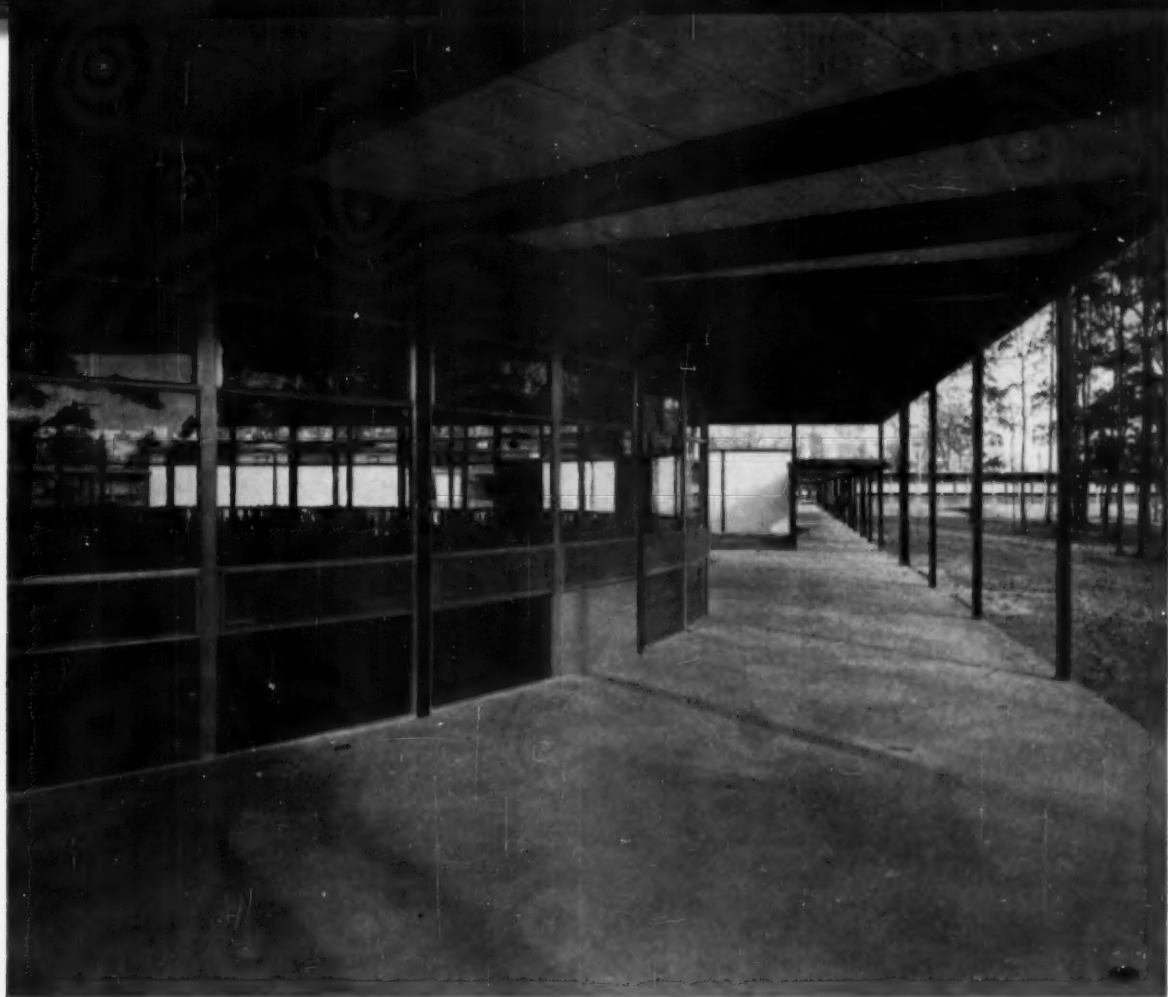
## depart from rectangular forms



Above: Circular library (Headland High School, East Point, Ga.; designed by Aeck Assoc.). Right: Triangular classrooms grouped in a hexagonal-shaped building unit (Shaffer Road School, Atwater, Cal., by Frank Wynkoop). Below: Circular auditorium (A & M Consolidated High School, College Station, Texas, by Caudill, Rowlett, Scott & Assoc.).

Roland Chatham





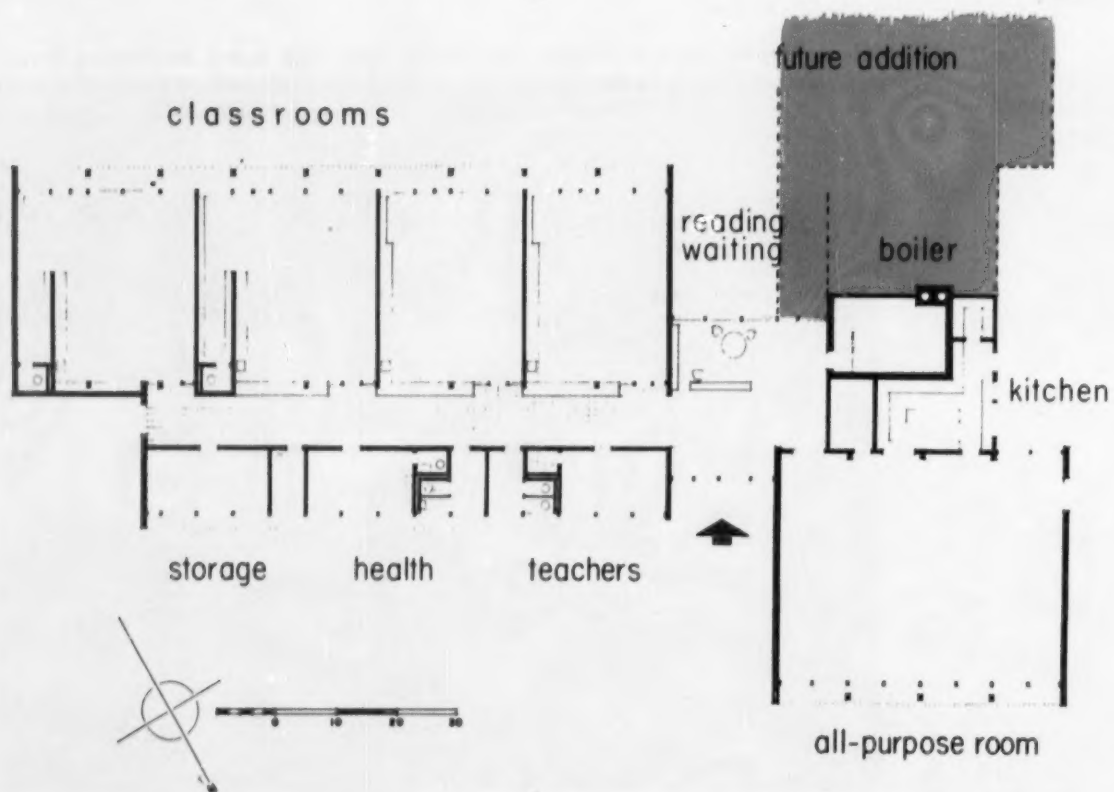
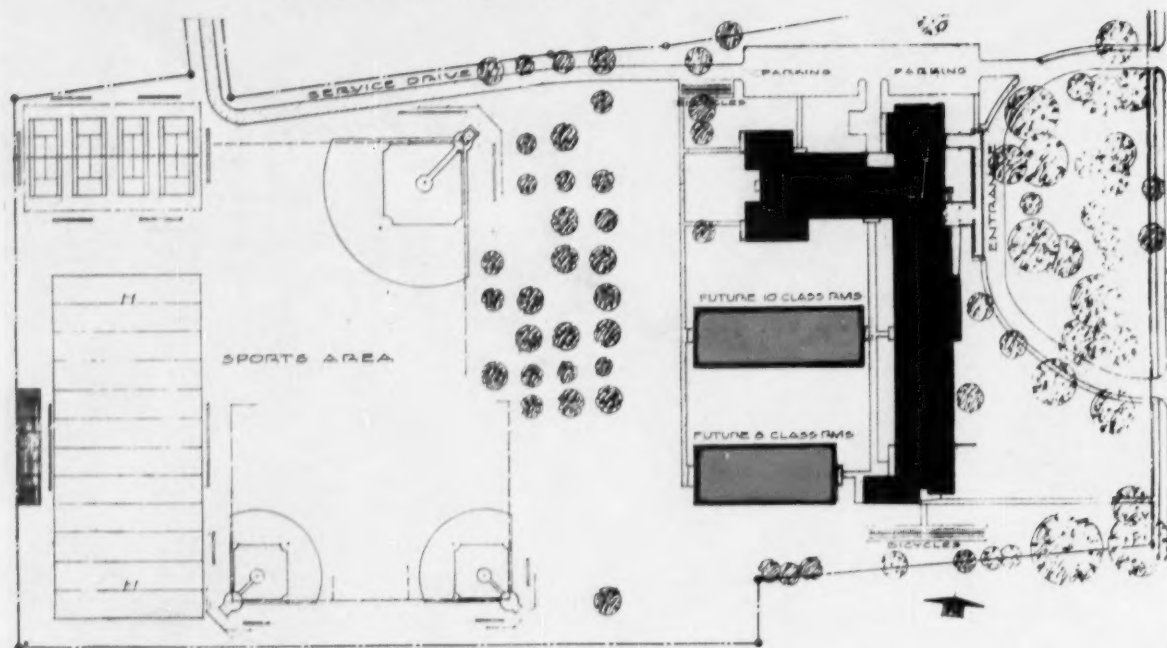
Lisanti-Alderman

Above: Circular cafeteria-assembly area (Wilson Junior High School, Mecklenburg County, N.C.; designed by A. G. Odell, Jr. & Assoc.). Below: 18-classroom wing describes a quarter-circle arc at the foot of a knoll (Sungam Elementary School, Melville, N.Y.; by Daniel Perry).



Parker

# how new schools provide for expansion





Roger Sturtevant

Above left: Plan allows future addition of two classroom wings (Gorgas Junior High School, Toulminville, Ala., designed by Hammond & Woods).

Left: Direction of expansion is indicated on original plan (New Preston, Conn., Elementary School, by Nichols & Butterfield).

Above: Maximum flexibility within the enclosed structure provided by nonbearing, interchangeable partitions which permit unlimited rearrangement of spaces (Hillsdale High School, San Mateo, Cal., by John Lyon Reid & Partners).

## how new schools build with glass

Hodrich-Blessing



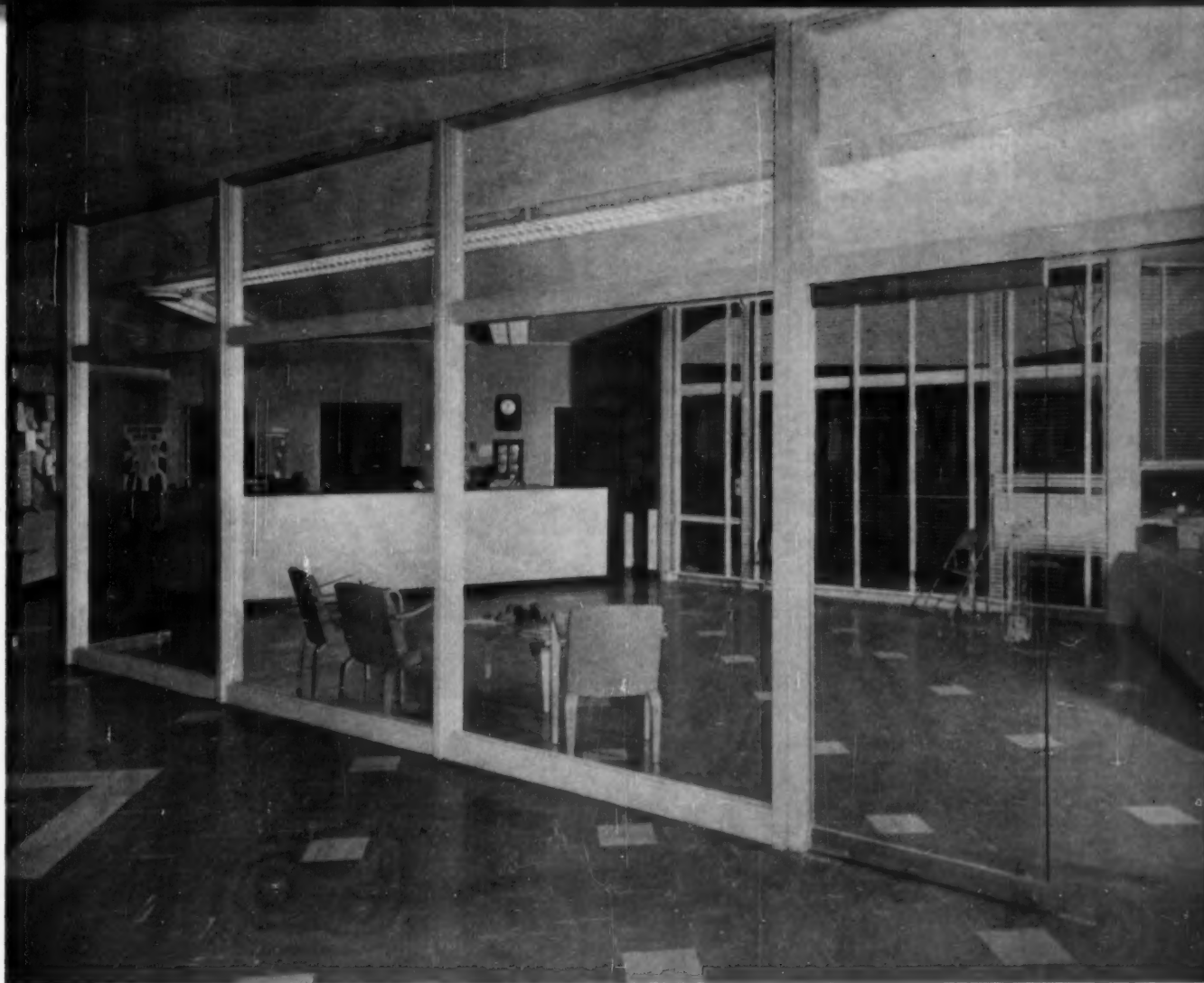
Charles N. Pratt



Lisanti-Alderman



Above left: Window walls between classrooms (Blackhawk Elementary School, Freeport, Ill., designed by Childs & Smith). Above: Dramatic glass facade at building entrance (Eastern Junior High, Greenwich, Conn., by J. Gordon Carr). Left: Glass above and below lockers in corridor (Wilson Junior High, Mecklenburg, N.C., by A. G. Odell, Jr. & Assoc.).

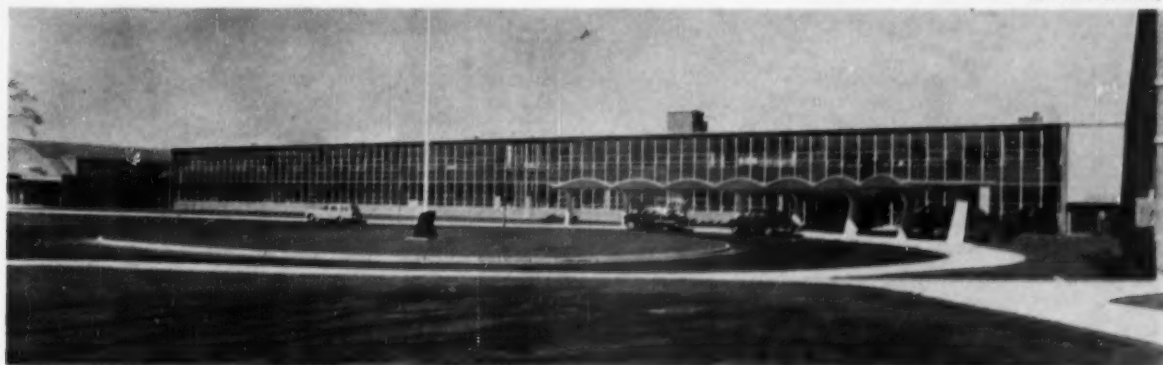


Wm. E. Rickart

Above: Glass wall separates reception area from corridor (King Philip School, West Hartford, Conn., by Ebbets, Frid & Prentice).

Below: Sweeping 2-story glass facade (Veterans' Memorial High School, Warwick, R.I., by MacConnell & Walker).

Lawrence E. Tilley



June, 1956

how new schools

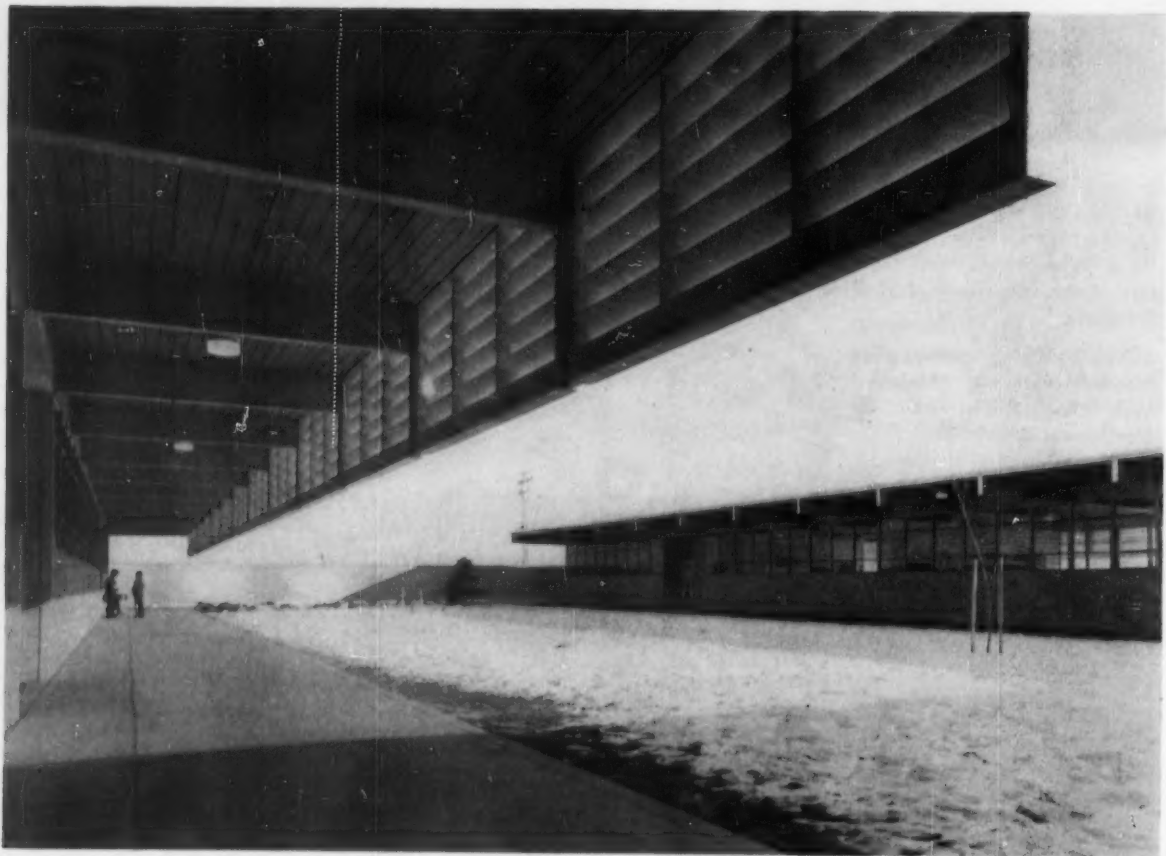
## solve the lighting problem



Don Carlson

*Left: Translucent awning shields southern classrooms from sun (Idaho Springs, Colo., Elementary School; designed by Robert W. Ditzen).*

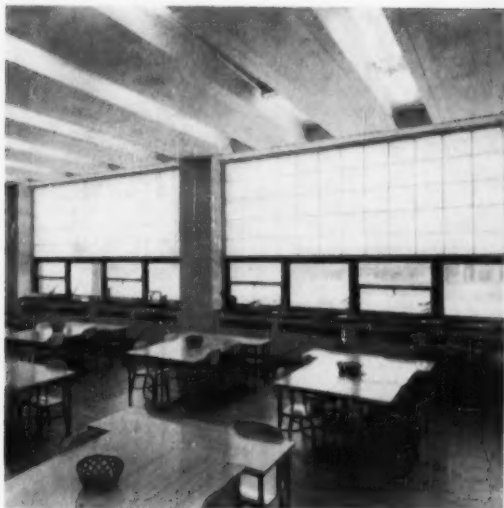
*Below: Roof overhang on north side and suspended louvers on south side counteract sun and sky glare (Midway Elementary School, Moses Lake, Wash., by Havind, Harthorne & Smith).*





Betty Baldwin

William E. Bradley



Above: Overhangs eliminate glare from sun; 4 plastic skylights supplement artificial lighting in each classroom (Cherelyn Elementary School, Englewood, Colo., designed by Wheeler & Lewis). Left: Glass block above vision strip and fluorescent lighting in metal troffers provide even classroom illumination (John D. Fairbanks Elementary School, Detroit; by Clair W. Ditchy). Below: Skylights illuminate dark interiors; sliding glass panels lighten corridors and provide cross ventilation (Hawthorne Elementary School, Kennewick, Wash.; by John S. Villevik).



how new schools

## design a functional classroom



Gordon Bell

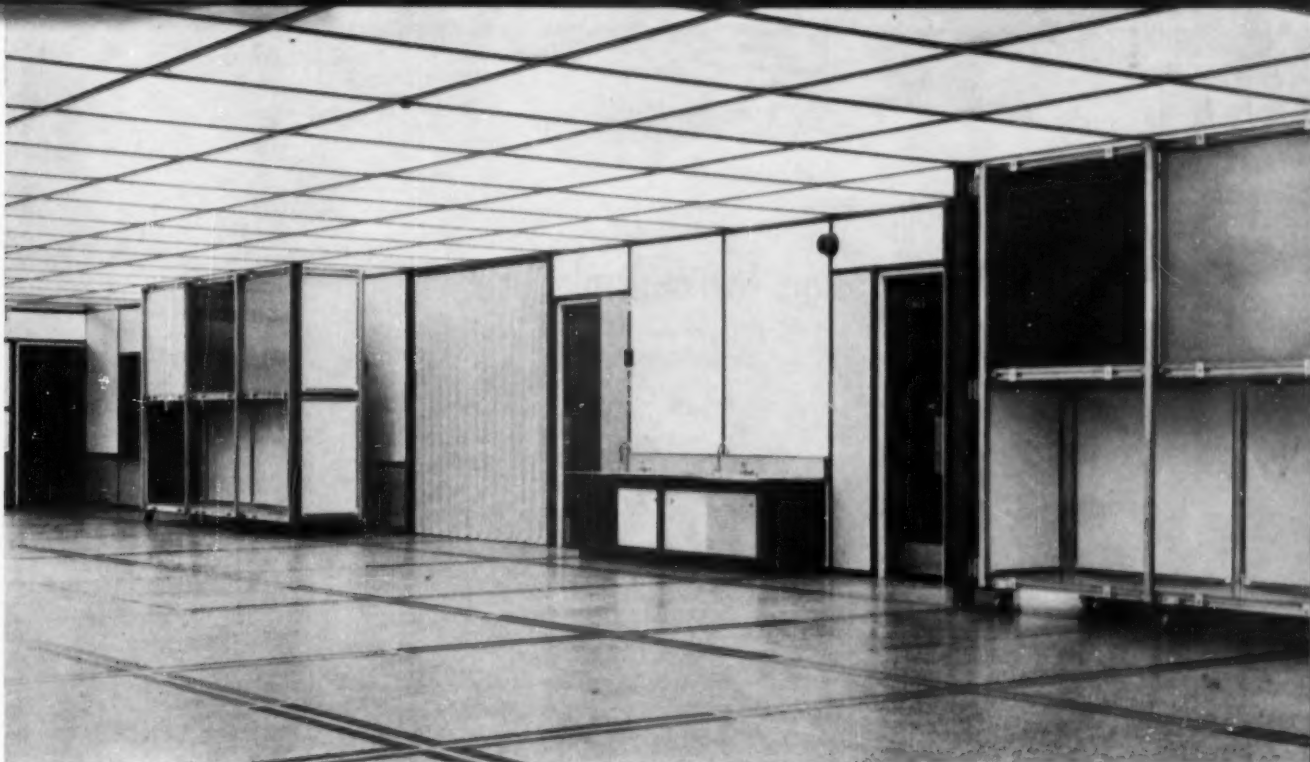


Lawrence S. Williams

New schools typically have large classrooms equipped with storage space, sink and, frequently, work or library alcoves and closet space, as shown here. Top: Honeyhill Elementary School, Norwalk, Conn.; designed by Cram & Young. Above: North Penn Joint Jr. High School, Lansdale, Pa.; by Howell Lewis Shay. Right: Grandview Elementary School, Piscataway, N.J.; by John B. Richards. Below: North Hill Elementary School, Seattle; by Mallis & DeHart.



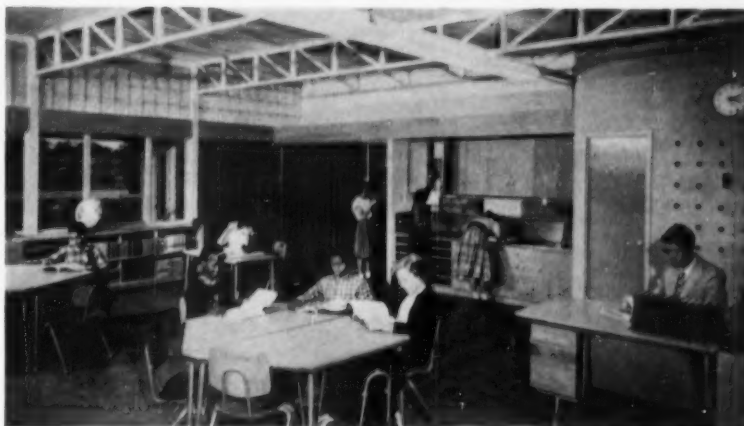
Art Hupf



Above: Rollable storage partitions make this play and classroom area flexible; construction utilized integrated Unistrut framing system (Hoover Elementary School, Wayne, Mich.; designed by Charles W. Attwood).

Right: 900-square-foot classrooms have own toilet and wardrobe (Dudley K-6 School, Battle Creek, Mich.; by Lewis J. Sarvis).

Below right: Two-story corridorless scheme has self-contained classrooms working in pairs (Idaho Springs, Colo., Elementary School; by Robert W. Ditzen).



Foy Carlson

how new schools

## design for multiple use



Above: All-purpose room with stage and cafeteria service (Coronado Elementary School, Amarillo, Texas; designed by M. Howard Ensign). Right: Multi-purpose building with in-wall dining tables and stage (Jefferson Elementary School, Riverside, Cal.; by Herman O. Ruhnau). Below: Combination cafeteria and auditorium (Gratigny Elementary School, Miami; by Joseph J. DeBrita). Below right: Combination gymnasium and auditorium (Midview High School, Grafton, Ohio; by Beiswenger, Hoch & White).

Field Studios



James Israel





Julius Shulman

Above: Multi-purpose room has street entrance and is adjacent to the kitchen (William Penn Elementary School, Bakersfield, Cal.; designed by Whitney Biggar). Right: Multi-purpose room with stage (James T. Hixson Jr. High School, Webster Groves, Mo.; by Childs & Smith with Wm. B. Ittner Inc.).



Hedrich Blessing

how new schools

## handle large-group spaces

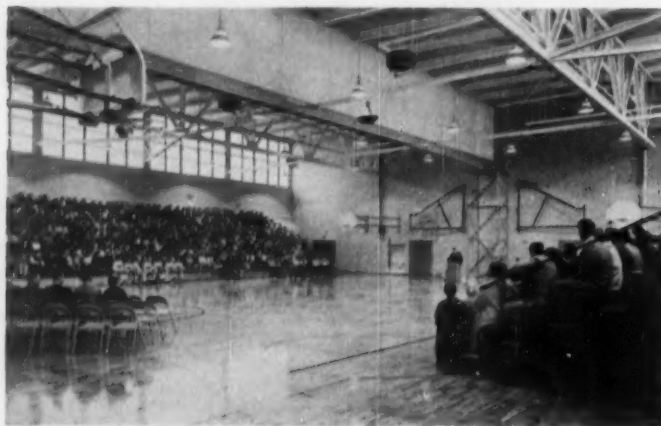


Wm. E. Rickert

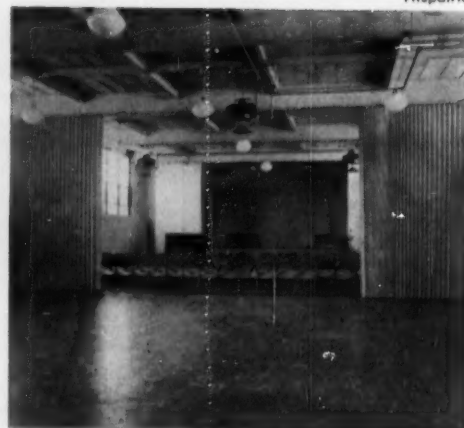


William Wollin

Above: Auditorium with bowled floor seats 800 in this combined elementary and junior high school (King Philip School, West Hartford, Conn.; designed by Ebbets, Frid & Prentice). Right: Cafeteria seats 430 and is adjacent to a separate faculty dining room (Janesville, Wisc., Senior High School; by Law, Law, Potter & Nystrom). Below: Gymnasium for 1200-pupil school is placed for convenient community access (Shoreline Senior High School, Seattle; by Mallis & DeHart). Below right: Combined lunch-assembly room has folding partitions (Comer-Colbert Elementary & High School, Madison County, Ga.; by Stambaugh & Jett).



Art Hupy



Fitzpatrick



Above: Library for 435-pupil enrollment (Wamogo Regional High School, Litchfield, Conn.; designed by Nichols & Butterfield). Below: Library for 1500-pupil capacity school forms part of a "commons" patio (Tempe, Ariz., Union High School; by Kemper Goodwin).

Stuart Weiner



how new schools

## increase the corridor's function



Camera Shop

Above: Angled corridors to elementary and secondary units meet at triangular entrance lobby (Hillman, Mich., Community School; designed by Paul A. Hazelton). Right: Activity corridor shared by 4 classrooms (Cherokee School, Overland Park, Kans.; by Donald R. Hollis). Below: "Walk-thru" primary classrooms with storage, coat racks and activity counters opposite class area (Westover School, Stamford, Conn.; by William F. R. Ballard).



Wayne Wright



THE SCHOOL EXECUTIVE



Roland Chatham

Above: Single-loaded corridor with storage cabinet separation from classrooms (A & M Consolidated High School, College Station, Texas; designed by Caudill, Rowlett, Scott & Assoc.). Right: Corridors have storage cubicles and display cases by each classroom door (Pekin, Ill., Community High School; by Foley/Hackler/Thompson/Lee). Below: Corridor has wardrobe cubicles cut back to provide seats for children; teachers' storage cabinets above (Sunquam Elementary School, Melville, N.Y.; by Daniel Perry).

Associated Photographers



Parker Photo Service



how new schools

provide a "quiet place"



Cortland Hubbard



Hedrich-Blessing



Hedrich-Blessing

Variouslly labeled as lounge, commons, lobby or foyer, attractively furnished and centrally-located spaces for social living appear frequently in new schools, as shown here. Above left: Walt Disney Elementary School, Tullytown, Pa.; designed by John S. Carver. Center left: James Yaddin Joyner Elementary School, Greensboro, N.C.; by Andrews & McGeady. Bottom left: Blackhawk Elementary School, Freeport, Ill.; by Childs & Smith. Above: James T. Hixson Junior High School, Webster Groves, Mo.; by Childs & Smith with Wm. B. Ittner. Right: Newton, N.J., High School; by Jay C. Van Nuys & Assoc. Below right: Barry College Fine Arts Bldg., Miami; by Barry & Kay.



Tierney & Killingsworth



how new schools

provide a place for the teacher

Ken Smith



Art Hupy





Spaces earmarked as faculty lounges or teachers' rooms appear in a surprisingly large number of new schools. Designed to provide the staff with a comfortable and private area for relaxation or shop talk, some of these rooms contain kitchenette facilities. Above extreme left: Central Dauphin High School, Harrisburg, Pa.; designed by Edmund Geo. Good, Jr. Above left: Shoreline Senior High School, Seattle; by Mallis & DeHart. Left: men teachers' room and, above, women teachers' room, Garden City, N.Y., High School; by Eggers & Higgins. Right: Academy of the Sisters of Mercy, Lower Gwynedd Township, Pa.; by Nolen & Swinburne.

Cortland Hubbard



how new schools

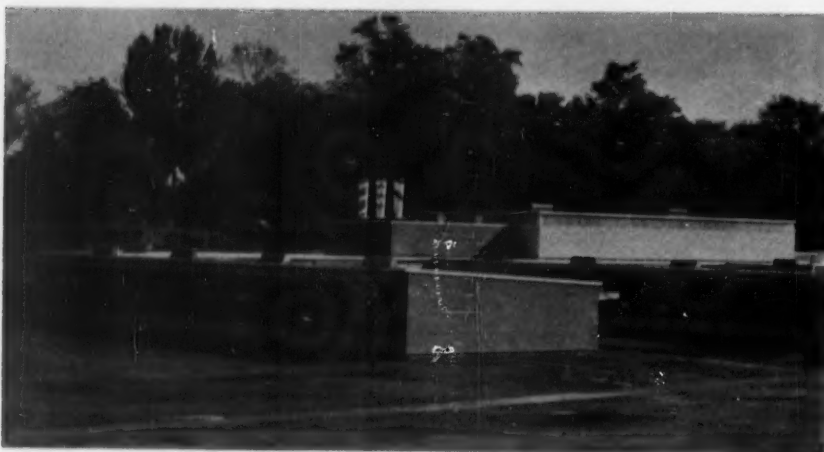
## add an identifying fillip



Cortland Hubbard

The added touch that lends a note of identification, decoration or just charm to a structure appears in these, among other, new schools.

Top left: Disney animal characters adorn theater walls in Walt Disney School (the children chose the name), Tullytown, Pa.; designed by John S. Carver.

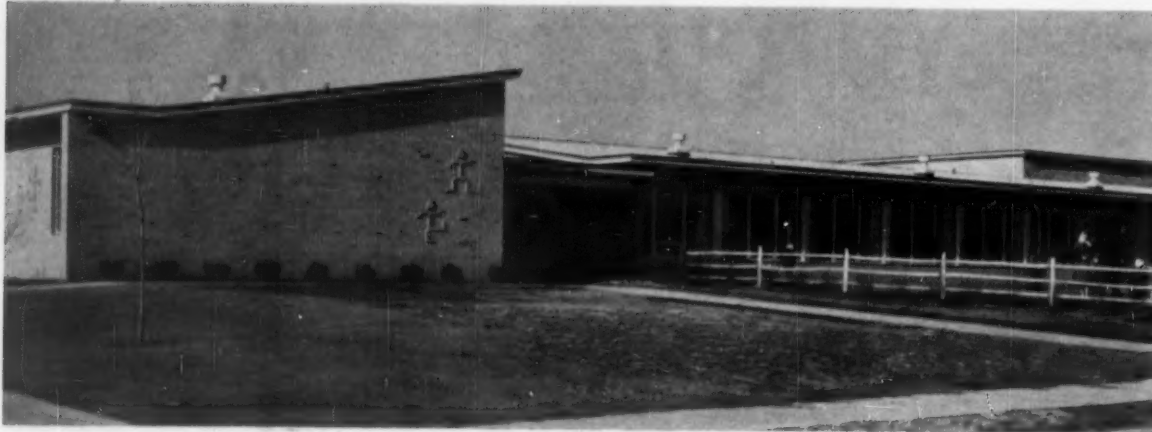


Left: Boiler and incinerator stacks have candy-stick design atop Westover (but called Candy Stick) School, Stamford, Conn.; by William F. R. Ballard.

Below: Abstract child figures in bas relief decorate brick exterior of S. C. Johnson School, Racine, Wisc.; by Warren Holmes Co.

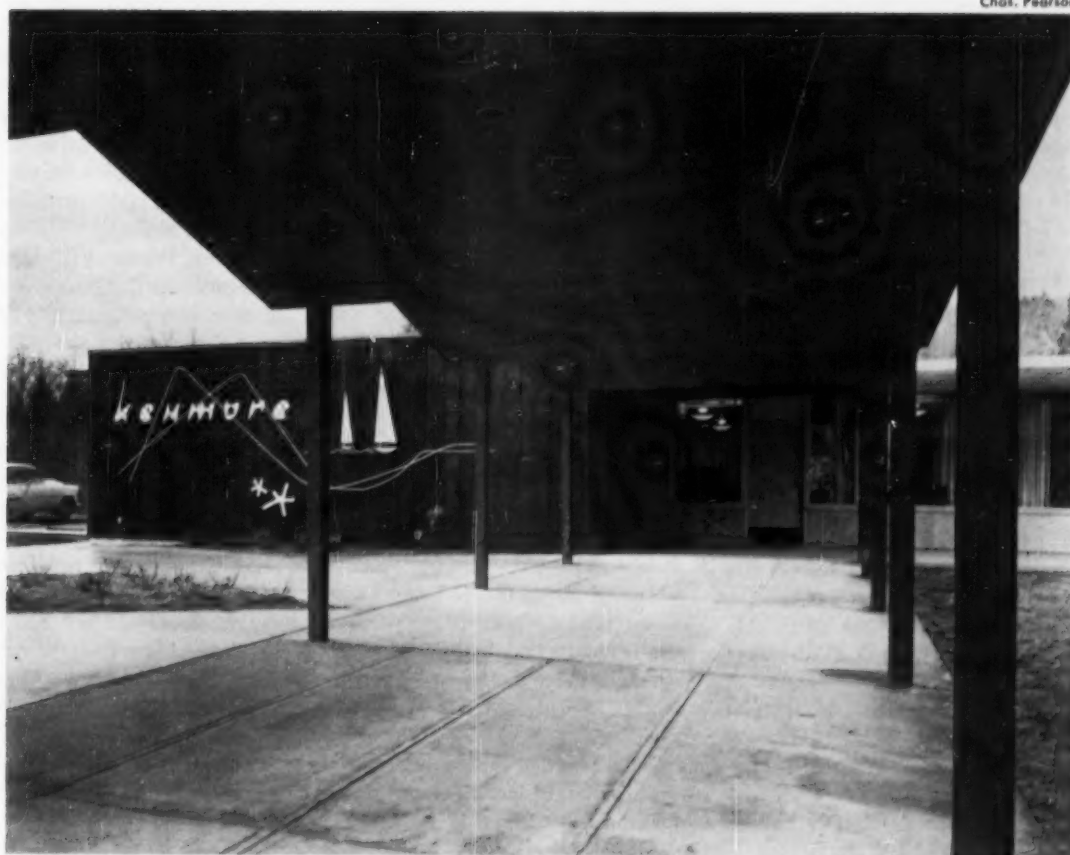
Right: Name and topography detail add insignia trim to two Washington schools: May Valley Elementary, in Coalfield, and Kenmore Elementary, in Kenmore; both by Ralph H. Burkhard.

Hedrich-Blessing





Chas. Pearson



Chas. Pearson

June, 1956

### Josephs, Henry Head Higher Ed Committee

WASHINGTON—President Eisenhower has appointed a 33-member Committee on Higher Education, to study the needs of education beyond the high school, and inform him of their conclusions.

Representing educational, business, professional, labor and parents groups, the committee is headed by Devereux C. Josephs, chairman of the board, New York Life Insurance Company.

Mr. Josephs served recently as chairman, College Grants Advisory Committee, Ford Foundation.

Vice chairman of the committee is David D. Henry, president, University of Illinois.

President Eisenhower called on the committee for advice in view of the approaching enrollment flood, now inundating elementary and secondary schools, soon scheduled to hit American colleges and universities.

#### Need for redirection

In addition to the enrollment problem, there are many who feel that the most urgent need for redirection in educational thinking exists at the more advanced levels.

Besides Mr. Josephs and Dr. Henry, other prominent persons included on the Committee are:

Roy E. Larsen, president, *Time*, Inc.; Harold C. Case, president, Boston University; Paul L. Essert, professor of education, Teachers College, Columbia University; Frederick L. Hovde, president, Purdue University; Vernon L. Nickell, superintendent of public instruction, State of Illinois; Katherine E. McBride, president, Bryn Mawr College; James L. Morrill, president, University of Minnesota; and Kenneth E. Oberholtzer, superintendent of schools, Denver.

### WHC Committee Asks "Short Time" Federal Aid; Hayes, Shull Dissent

WASHINGTON—The long-awaited report of the Committee for the White House Conference on Education, presented to President Eisenhower in April, met with varying response from educators and laymen.

Most discussion centered around the issue of federal aid. The Committee came out in support of federal funds for school construction, emphasizing that any official U. S. financial support to education be on a short-term emergency, rather than a long-range, basis (see page 130).

Frank H. Sparks, member of the Committee and president of Wabash College, admitted that there is an emergency schoolroom shortage, expressing, however, his belief that the emergency is not so great, but that "practically every state in the nation can meet it with reasonable adequacy if there is a will to do so.

"Practically all states have sufficient financial resources to take care of the essential needs of their schools immediately," he feels.

While he advocated federal loans to states which had exhausted all reasonable means of helping themselves, he stated bluntly that the ability of a state to educate its children is "a measure of its competency as a state."

Committee Members Albert J. Hayes, president, International Association of Machinists, and Martha A. Shull, high school teacher, Portland, Ore., offered a dissent to Dr. Sparks and the report.

They declared that it is not necessary to deny educational opportunities to children while their elders argue over the authority and responsibilities of various levels of government.

Admitting that there should be reorganization of inefficient and wasteful school districts, they felt that the need for federal funds is now and

that federal aid to schools is merely an extension of the long-recognized principle of supporting schools by taxing wealth wherever it is, and educating children wherever they live.

Both Mr. Hayes and Miss Shull took exception to the recommendation for school construction aid "on a short-time emergency basis," declaring that the need for federal aid is not limited to school construction, nor is it a "short-time" proposition.

In a public evaluation of the report, NEA executive-secretary, William G. Carr said that the recommendation of the Committee was "exactly what President Eisenhower recommended to Congress and the kind of emergency program NEA has urged upon Congress for the past several years."

#### Bill in Rules Committee

His statement included a reminder that a bipartisan bill to do just what the White House Conference report recommended is now pending in the Rules Committee of the House.

Dr. Carr expressed his pleasure that "a classroom teacher and a labor union president tried to extend the White House Conference Committee's vision to the future need for increased and substantial federal participation in the financing of public elementary and secondary education."

Congratulating them, he stated the

conviction of NEA "that the need for federal assistance is neither temporary nor confined to school building construction.

"Federal aid for school operation is needed and the facts presented in the White House Conference Committee report provide conclusive evidence to support this view."

## ICEC Delegates Urge Several Tax Exemptions

MINNEAPOLIS—The delegates to the convention of the International Council for Exceptional Children have asked Congress for income tax exemptions for families who must foot the bills for the education and support of severely handicapped children.

The Council also recommended that tax exemptions be broadened for teachers who must take extra work for certification requirements or for continued employment.

Included in resolutions passed by the delegate assembly were recommendations that state departments of education be urged to staff divisions of special education with strong leadership to provide professional administration, supervision and consultant help, diagnostic services, and research in the field of special education.

Other recommendations were that city departments, county units and other area divisions of special education be directed and supervised by qualified personnel in the field of special education, and that university and college programs for the education of exceptional children be staffed by professionally qualified leaders.

Other business enacted was the election of Maurice Fouracre, head, Department of Special Education, Teachers College, Columbia University, as president-elect of the Council.

He succeeds Elizabeth M. Kelly, assistant superintendent of schools, Newark, N. J., who became president at the close of this convention. Dr. Fouracre will assume the presidency next year after the annual meeting in Pittsburgh.

Three state members elected to the Council's governing board are:

## NCCBS Accepts TV Film Gift

Henry Toy, Jr. (l.), executive director, National Citizens Council for Better Schools, accepts a special film gift of four half-hour programs presented on television last year on the White House Conference on Education, from Donald H. McGannon, president, Westinghouse Broadcasting Company.



Maynard C. Reynolds, director, Psycho-Educational Clinic, University of Minnesota; John E. Taylor, state director of special education for handicapped children, Olympia, Wash.

The convention came to a close with a luncheon meeting at which Paul Misner, superintendent of schools, Glencoe, Ill., was the principal speaker.

Dr. Misner, who is also president of AASA, predicted that within a decade educational and vocational counselors, psychologists, guidance workers, therapists, doctors, dentists, and nurses will be fully accepted as permanent members of school faculties.

## Skill, time, effort

"Slowly but surely we are beginning to recognize that the identification, placement, and treatment of exceptional children requires skill, time, and a high level of cooperative and coordinated effort," Dr. Misner said.

"The only way to do the job intelligently is to spend time and a great deal of physical and emotional energy with the problem. Devotion to the task is only part of the answer.

"Another part involves the closest kind of educational teamwork we are capable of harnessing," he concluded.

ICEC is a 9,000-member organization which serves as a coordinating force between special and general education and between various related professions, concerned with problems of exceptional children. It is a department of NEA.

## Music Educators Have Musical Anniversary

ST. LOUIS—The Music Educators National Conference observed its 50th anniversary here in April in a six-day national convention and music festival, which brought more than 10,000 teachers and their students to Kiel Auditorium.

A distinctive feature of the program was the Golden Anniversary Orchestra, Chorus and Band, composed of 850 high school students representing every state in the nation. Among the conductors of these musical groups were Raymond F. Dvorak, Thor Johnson, Peter J. Wilhousky, Mabelle Glenn and Harold Bachman.

Another outstanding feature was the Wagnerian opera *Parsifal*, presented by the Indiana University School of Music. A portion of this opera was televised on *Wide, Wide World*.

Musical demonstrations were not confined to classical compositions. The progressive jazz artist, Dave Brubeck, gave a special demonstration of this type of music. Other sessions presented selections by members of the Society for the Preservation and Encouragement of Barber Shop Quartet Singing in America.

The scope of the convention is indicated by an enumeration of a few of the musical organizations represented. The University of Colorado, Boulder, sent a choir of 75 members and a concert band of 96 instruments. The University of Wisconsin Choir, with more than 70 members, provided a demonstration for the in-



Washington—Executive board members of the Association of School Business Officials met here recently, and made plans for their organization's 42nd annual convention, to be held here October 7-11. Seated (l. to r.): J. Wilbur Wolf, Omaha, Neb., president; Mrs. Charles N. Zellers, Washington, co-chairman, Ladies Hospitality Committee; Charles N. Zellers, Washington, local committee chairman. Standing: Herschel S. Brannen, Houston; Alfred C. Lamb, Detroit; J. Harold Husband, Grosse Pointe, Mich.; Percy M. Muir, Toronto, Can.; Andrew C. Hutson, Jr., Knoxville, Tenn.; G. Alvin Wilson, Oak Park, Ill.; Frank J. Hochstuhel, Jr., Bloomfield, N. J.; Joseph P. McElligott, San Francisco.

terpretation of music by choral organizations. The Tulsa, Okla., Elementary Boys Choir demonstrated music for the junior high school.

Musical organizations came from Albuquerque, N. M.; Northwestern University, Evanston, Ill.; Collingswood, N. J.; Atlanta, Ga.; Springfield, Mo.; Lawrence, Ka.; Ponca City, Okla.; St. Louis and many other cities.

The Eastman School of Music, Rochester, N. Y., was represented on the program by a string quartet. Oberlin College, Oberlin, Ohio sent its orchestra for a special program during the convention.

Speakers included Howard Hanson, director, Eastman School of Music, Rochester, N. Y.; William Schuman, president, Juillard School of Music, New York City, and Egon Kraus of Cologne, Germany, secretary-general of the International Society for Music Education.

Among the foreign nations represented were Germany, Chile, France, Korea, Panama, Mexico, Argentina, Venezuela, Cuba, England, Italy, Iran, Austria, Japan, Nicaragua, Colombia, Canada and Guatemala.

The next convention of MENC, a department of the National Educa-

tion Association, will be held in 1958 in Los Angeles, Calif.

### UN Study Shows Progress Toward Universal Education

UNITED NATIONS—Educational progress made over the last decade in non-self-governing territories, marked by the extension of primary education "towards the goal of universal and free schooling," and developments in vocational training and secondary education, are reviewed in a series of reports published by the United Nations Secretariat.

The report on "General Developments" notes that in some of the territories the principle of compulsory school attendance is on the statute books and, in virtually all, progress has been made towards the accepted goal of universal and free education.

The translation of these aims into practice, however, is hampered by a number of obstacles such as shortage of funds, too few trained teachers, organizational difficulties of adapting education to local needs and, in some cases, the problem of changing traditional attitudes of the indigenous inhabitants.

### Community Colleges Held As Aid in Ohio Shortage

COLUMBUS, Ohio—A survey report submitted to the Ohio College Association by Dr. John Dale Russell, survey director, has declared an "immediate and urgent need" for the establishment in Ohio of community colleges to ease the state's mounting enrollment problem.

Dr. Russell recommends that the new institutions be publicly controlled, geared closely to the needs of the local community, with major emphasis on vocational and technical preparation.

He also proposes that they offer courses of college freshman and sophomore level acceptable on transfer to degree-granting colleges and universities. They would not attempt instruction beyond the sophomore level.

Members of the Ohio College Association, which had sponsored the four-month study, took no immediate action on the report in a general session, April 21, at Ohio State University.

The group voted, however, to call another meeting in Autumn, after copies of the Russell report have been printed and distributed to the entire OCA membership, and at that time take steps to implement the study.

The 100-page report, entitled *Meeting Ohio's Needs in Higher Education*, presented data on the state's position in the nationwide program of higher education; surveyed present facilities for higher education, and current institutional planning for meeting the enrollment upswing; and reviewed questions of public and social policy regarding the future development of higher education in Ohio.

In evaluating Ohio's economic position in relation to the rest of the United States, Dr. Russell found the surprising fact that Ohio is "falling considerably short of what should be expected of it in comparison with the levels of productive service in higher education maintained in the rest of the country.

"The number of educational institutions in Ohio is relatively low," the



**you'll be glad  
you chose Griggs**

Five...ten...fifteen years from now, you'll be happy that you selected Griggs modern school seating. It's designed to fit into classrooms of today and tomorrow... it's constructed to withstand the wear and tear of daily use and student abuse. And every year Griggs seating is in your school, your students will find it's made for *comfort*.

Handsome, new Griggs Skyliner Chair Desk — No. 450, a graceful and *practical* school seat.



Griggs Push-Back Auditorium Chair—the finest made for theaters or schools.



Airliner No. 700 Desk with No. 740 Chair. Tough, lightweight tubular seating.



New Airliner No. 780-A. Study Top Desk. Sturdy tubular frame and wide work space.

Write for new, complete, Griggs Seating catalog

**GRIGGS**

**Equipment Company, Belton, Texas**

MANUFACTURERS OF SCHOOL, CHURCH, AND THEATRE SEATING



## Here's how TUF-FLEX glass saves you money

No crash of broken glass. No danger to people inside. No repair bill.

It's easy to see why so many schools are glazing all windows in vulnerable spots with L·O·F *Tuf-flex*\* tempered plate glass. *Tuf-flex* is 3 to 5 times stronger than regular plate glass of the same thickness!

We hope the column at the right will answer any questions you have. If you'd like more facts, just write to the address at the bottom of the column. You can order *Tuf-flex* from your local Libbey-Owens-Ford Glass Distributor or Dealer (listed under "Glass" in the yellow pages). \*®



## TUF·FLEX GLASS

LIBBEY • OWENS • FORD *a Great Name in Glass*

## TUF-FLEX FACTS



**THIS TEST** shows a half-pound ( $1\frac{1}{4}$ " diameter) steel ball being dropped 10 feet on a piece of  $\frac{1}{4}$ "-thick Tuf-flex tempered plate glass. The ball bounces off without damaging the glass. If maximum impact resistance is reached, Tuf-flex disintegrates into small, relatively harmless particles, not big jagged pieces.

**MAKE SURE** that your architect orders the exact sizes of Tuf-flex needed. It cannot be cut to make it fit!

For further information, write to Dept. 8766, Libbey-Owens-Ford Glass Company, 608 Madison Avenue, Toledo 3, Ohio.

**LIBBEY  
OWENS  
FORD**

## SPOTLIGHT

report stated, "the financial support is small, the enrollments and the production of Bachelor's degrees are distinctly below expectations and in graduate degrees Ohio falls far short of producing its share of the national total."

Ohio, which has 5.5 percent of the total population of the nation, 6.0 percent of the total personal income and 5.6 of the total retail sales, still had only 3.3 percent of the number of institutions of higher education. Ohio has 61 such institutions, out of 1,855 in the United States.

To reach a level comparable to its total civilian population and economic resources in relation to the rest of the nation, Ohio would need to have 43 more institutions than it has now, the report claimed.

Dr. Russell, who is chancellor and executive secretary of the Board of Educational Finance for New Mexico, said he found that Ohio faces not only the need to expand facilities to care for the increasing enrollments of the future, but to extend markedly the present facilities on which that

expansion must be based.

In making his survey, Dr. Russell visited 54 institutions of higher learning in the state, and held interviews with the presidents. The outstanding need "recognized universally by the leaders in the Ohio colleges and universities is for current funds that will permit payment of better faculty salaries," his report stated.

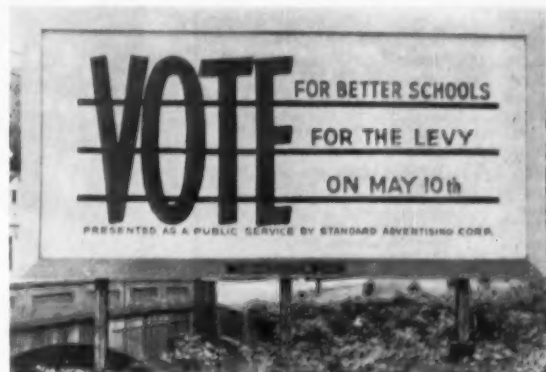
In some colleges, he found the average salary for faculty members is below \$4,000.

Private colleges in Ohio look for enrollment increases of approximately 65 percent over 1955 in the next ten years, with a 77 percent increase foreseen by 1970. If these forecasts in private institutions hold true and no new privately-controlled colleges are established, the publicly-controlled colleges and universities face enrollments of two and one-fourth their present size by 1965, and four times the present number of students by 1970, the report revealed.

Dr. Russell was engaged to undertake the Ohio survey by the OCA Committee on the Expanding Student Population, headed by Howard L. Bevis, president, Ohio State University.

### School Bond Poster Places Second in Ad Contest

*This poster won prize in national ad contest for Clarksburg, W. Va., school groups.*



CHICAGO—A poster urging citizens to vote for better schools in the bond levy in Clarksburg, W. Va., has won a high award in a national contest.

The poster won second award in the poster campaign division of the Fourth Annual Local Outdoor Advertising Contest, sponsored by the Outdoor Advertising Association of America.

The Clarksburg Community Council and the Citizens Committee for Better Harrison County Schools, also of Clarksburg, were among 30 local advertisers from all over the country who were selected for first, second or third awards in ten contest divisions.

Over 300 local advertisers entered the competition this year, representing all fields of business and profes-

## Why Faucets Leak

Faucet washers, when fastened with TOO LONG or SHORT screws—as in “9 out of 10” replacements by best mechanics—quickly work loose, destroy themselves!

“SEXAUER” finds the answer—after 34 years research

Now, NEW Pat'd. “Sexauer” SELF-LOCK screws, with expanding NYLON PLUG imbedded in the threads, fasten and lock at correct depths AUTO-MATICALLY, hold faucet washer firmly. Made of rust and corrosion resisting Monel, heads won't twist off, screw slots won't distort; they can be used over and over.

When installed with NEW Pat'd. “Sexauer” EASY-TITE faucet washers, this combination outlasts past faucet repairs “6 to 1”!

EASY-TITES are made of super-tough, pliable duPont compound (neither rubber nor fibre) to withstand super-hot water and make tight even on worn, corroded seats. They are further reinforced with a vulcanized layer of Fiberglass to resist distortion and splitting from shut-off squeeze.

### The hidden costs of faucet leaks!

As authenticated by Hackensack, N. J. Water Co. and American Gas Association, stopping just ONE pin-hole (1/32”) size leak can reduce water waste 8,000 gal. monthly. Stopping a hot water faucet “drip” can result in water and fuel saving of over \$7.58 QUARTERLY—plus material and labor costs and costly fixture replacements!

That's why thousands of Government Agencies, Housing Projects, Hospitals, Colleges, Schools, Manufacturers, Hotels, Realities and Utilities—country wide—look to “SEXAUER” Technicians skilled in plumbing maintenance know-how. They are trained to determine stock levels thru complete SURVEYS of actual fixtures in service and to install stock systems that avoid overstocking and shortages.

**NEW SELF-LOCK SCREWS** and **EASY-TITE** faucet washers are just part of the “SEXAUER” line of over 3000 TRIPLE-WEAR plumbing repair parts and Pat'd. precision tools.

A “SEXAUER” Technician in your vicinity will make our NEW, 126 pg. Catalog H available and gladly consult with you regarding your plumbing maintenance problems without obligation. Write today!

J. A. Sexauer Mfg. Co., Inc. Dept. X-66  
2503-06 Third Ave., New York 51, N. Y.

Gentlemen: Please send me a copy of your  
NEW, 126 page Catalog H.

My name..... Title.....

Company or Institution.....

City..... Zone..... State.....

**SEXAUER**  
WORLD'S LEADING SPECIALISTS IN  
PLUMBING AND HEATING REPAIR PARTS

Note Nylon plug — locks screws automatically



Note Fiberglass backing — resists closing squeeze

## SPOTLIGHT

sional life.

Sharing in the awards are the advertisers' agencies, the artists, and the local outdoor advertising companies. Award plaques are being presented to the winners in their own cities.

Besides the Community Council and the Citizens' Committee, awards went to the Clarksburg outdoor advertising firm, Standard Advertising Corp., and to the artist, Charles E. Lynn, Jr., of Standard.

### Graduating Teachers Have Many Job Opportunities

COLUMBUS, OHIO—A recent report of the Division of Appointments, Placement Office, College of Education at Ohio State University, reveals that beginning teachers graduating from the university last year could choose from 32 job opportunities each.

For the period extending from October 1, 1954 through September

30, 1955, the total number of requests for all kinds of educational personnel, including college teachers and school administrators, amounted to 12,074 during the placement year. This represented an increase of almost 3,000 over the previous year.

Greatest number of requests, 4,805 in all, were for elementary school teachers. Although this was approximately 1,400 more than in 1954, the figure still doesn't reveal the real demand for such teachers.

“Many superintendents did not list their needs after the first of May since they knew the office would not have any candidates available,” the placement officials explained.

The 4,266 calls for secondary school teachers, although slightly less than last year, also far exceeded the supply. English, music and science teachers were in greatest demand.

Again, the total number of calls doesn't give a true picture of the demand for high school teachers.

“Many prospective employers, realizing the short supply of these

SE-235

**Closeup**  
of the finest in  
locker protection  
**DUDLEY P-570**

Master-Keyed Combination Padlock. Rugged, cast aluminum case, beautifully satin finished. Extra heavy steel shackle, smooth-working pin-tumbler mechanism, exceptionally pick-resistant, self-locking.

Unique Dudley Master Key can't be duplicated on commercial key-making machines... extra security that costs no more. Every Dudley Lock carries a 2-year warranty. Write for Catalog Folder.

### DUDLEY Lock Corporation

Dept. 619, Crystal Lake, Illinois



**RD-2**

Popular rotating dial combination padlock. Stainless steel case.

# REVOLUTIONARY NEW Chemical Development!



## Churchill's AMAZING Floor Finish and Floor Sealer

## Nu-Clear

An entirely new, amazingly different resin is the base for both Nu-Clear Finish and Nu-Clear Sealer. The result of atomic-age research, only this oil-free resin can give the tremendous strength and durability found in these new Churchill products. Actual in-use tests have proved that while conventional oil-resin products soon oxidize and turn floors dark, Nu-Clear is lighter when applied... keeps natural floor color for years. Causes less shadow because of better light diffusion... assures cleaner floors because dirt can't hide. Provides excellent traction for players and referees. Give your floors the Nu-Clear treatment that wears longer, cleans easier to a beautiful high gloss. Call your Churchill distributor or representative, or write...

**50%  
more resistance  
to wear**

**Never changes natural  
floor color**

**Highly resistant to  
scuffing, rubber marks  
and burns**



**CHURCHILL MANUFACTURING COMPANY**  
GALESBURG, ILLINOIS

FOR SUPERIOR FLOOR AND BUILDING MAINTENANCE MATERIALS AND TOOLS

## SPOTLIGHT

candidates, did not bother to list their requests with us," said the placement officers.

How short was the supply of beginning teacher candidates? The College of Education granted bachelor's degrees to 511 graduates during the past year, but not all of these were available to enter the teaching profession, the report pointed out.

Of the total number of graduates, 117 received non-teaching degrees—in fine arts, music, occupational therapy and other areas. Moreover, of the 394 actually certified for public school teaching, 118 weren't available for such positions because of military service, marriage, other employment, graduate study or other reasons.

The number of graduates both certified for and interested in teaching was thus reduced to 276.

Salaries for the beginning teachers in public schools ranged from \$2,500 to \$4,560. The median was \$3,350, about \$150 higher than last year.

## School Law Conference Meets at Duke in June

DURHAM, N. C.—Problems of school law will again be in the spotlight when the Third School Law Conference meets here June 26-27 at Duke University.

The two-day sessions will feature leading authorities in their fields, designed to bring experience to bear on the subjects under discussion, according to E. C. Bolmeier, professor of education at Duke, and program chairman.

Problems to be discussed include pre-service training in school law; present status of federal grants for school construction; legal rights and liabilities of school personnel, and a panel on "Viewpoints on the Integration Problem."

### Speakers listed

Among those who have accepted speaking assignments are Judge John J. Parker of the Fourth Circuit Court of Appeals, Charlotte, N. C.; North Carolina Attorney-General William R. Rodman; Don Shoemaker, execu-

SE-238

Is this job  
really necessary?



**RYNOSEAL**  
penetrating wood finish

cuts maintenance  
in half . . .



Rynoseal finish actually lasts twice as long, because its heavy duty surface extends deep into the wood. It wears down slowly under scuffing that erases ordinary surface finishes. Patches, restoring aisles and sills, blend invisibly with previous coats.

For details and name of your distributor, write

SOUTHERN COATINGS & CHEMICAL CO.,  
Sumter, S. C.

 the coat that wears

## Here is CLASSROOM FLEXIBILITY Moduwall Live-walls

**Give a Lift to Good Teaching**—Enable you to provide economically whatever each classroom needs in tackboard, chalkboard, shelving and other wall-hung equipment.

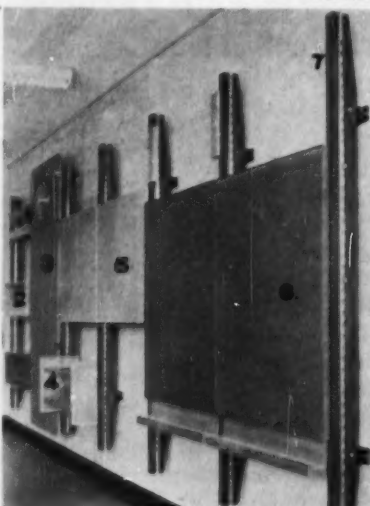
**Keep Classrooms Flexible**—Permit you to change all wall-hung equipment freely, as classroom needs change.

**Combine Beauty with Usefulness**—The lovely textured tackboard is available in six pastel colors; Moduwall shelving in natural finish and four colors. Moduwall Live-walls add warmth and beauty to the classroom.

**Modernize Old Classrooms**—It's just as easy to install Moduwall Live-walls in old schools as in new. Give all children in your schools the benefit of this important aid to better classroom teaching.

Write for "Classroom Walls Come Alive with MODUWALL."

**MODUWALL, Inc.**



Moduwall installation, showing 1) Utility Rails; 2) Bookshelf; 3) Teacher's closet; 4) Magazine Rack; 5) Tackboard; 6) Chalkboards; 7) Moduwall Standard.

Other units include Pegboard, Flannel-board, open shelves, map case, supply cabinets, drop leaf tables, acoustical panels, motion picture screens, etc.

175 Fifth Avenue, New York 10, N. Y.

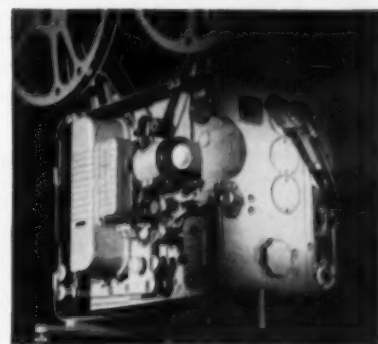
SE-237



**GREAT NEW TEACHING TOOL.** The Filmosound 385 Specialist sets even higher projection standards with increased amplifier and speaker power, sound-insulated aluminum doors, an end to warm-up delay. Famous for jeweled film-handling parts with 400% longer life, flickerless projection, easy operation.

Choose your teaching partners  
from these A-V leaders...

FINER PRODUCTS THROUGH  
**IMAGINATION Bell & Howell**



**BELL & HOWELL JAN** shines in auditoriums, throws twice as many light units as a standard 1000-watt, 25-hour projector.



**TDC SCHOOLMATE** projector shows 2" x 2" slides and single or double-frame filmstrips. Blower cooled, 300 or 500 watts.



**BELL & HOWELL SPECIALIST** tape recorder has "Miracle 2000" sound system. Ideal for music appreciation classes.

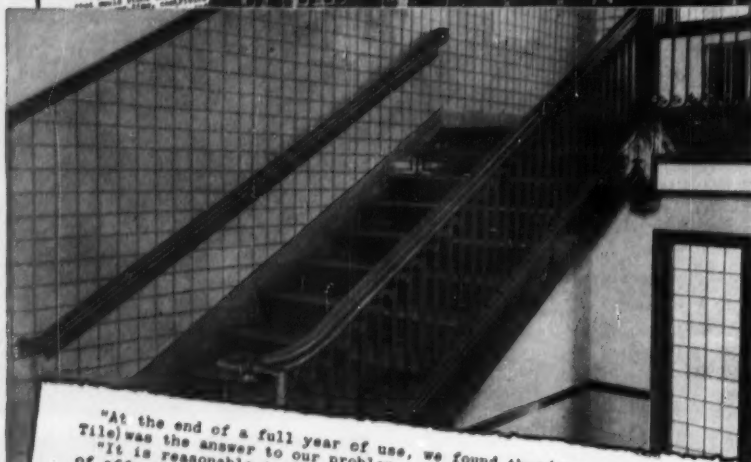


**TDC STEREOTONE** tape recorder combines portability with quality performance features—10" speaker, three-motor drive.

See your Audio-Visual dealer or write Bell & Howell, Chicago 45. In Canada: Bell & Howell, Ltd., Toronto

# "We found the answer to our problem"

says JOHN L. FITZPATRICK  
Superintendent of Schools  
Chicopee, Mass.



"At the end of a full year of use, we found that (Church Plastic Wall Tile) was the answer to our problem. It is reasonable to install of effort; contributes to the brightness and general atmosphere of the building; and it is, we believe, a sound investment for the stimulation of respect in our pupils, protection of our property, and an inexpensive cost to our taxpayers."

Very truly yours,  
*John L. Fitzpatrick*  
Superintendent

**Stairwells** in the Chicopee High School get heavy use with daily traffic of over 1,000 students. Church Tile was installed in every stairwell in the building and not only looked better and wore better, but actually promoted students' cooperation in keeping stairwells clean and unmarked.

That's proof of the beauty, utility and economy of Church Plastic Wall Tile.

**IF YOU HAVE A PROBLEM**  
in maintenance or decoration,  
send this coupon for illustrated  
brochure and full information.

C. F. Church Mfg. Co., Dept. SE-5, Holyoke, Mass.  
Division of **AMERICAN-STANDARD**  
Please send information about Church Wall Tile.

Name.....  
Street address.....  
City..... Zone..... State.....

**Church Tile**  
PLASTIC WALL

## SPOTLIGHT

tive director, Southern Reporting Service, Nashville, Tenn., and Charlotte Attorney R. Mayne Albright.

Messrs. Rodman and Albright will speak at the session on integration, and Mr. Shoemaker will summarize the developments on that issue.

The first Duke conference in June, 1954, followed the Supreme Court decision on the school question by a few weeks.

The meeting also led to the creation of the National Organization for Legal Problems of Educational Administration, which is concerned with all school law problems.

A wide range of professional groups again will be invited. This will include members of local and state school boards, school administrators, specialists in education from government, school attorneys, professors in education and teachers. Others interested in the problems will be welcome, Dr. Bolmeier said.

Other speakers and participants will be: Lee O. Garber, professor of education, University of Pennsylvania; E. Edmund Reutter, Jr., associate professor of education, Teachers College, Columbia University; Edgar Fuller, executive secretary, National Council of Chief State School Officers; Warren E. Gauerke, associate professor of education, Emory University; Madelaine Remmlin, assistant director, research division, National Education Association; Newton Edwards, professor of education, University of South Carolina; and Charles F. Carroll, N. C. superintendent of public instruction.

## Low Raises in Nebraska Increase Teacher Shortage

LINCOLN, Neb.—"While Nebraska teachers will receive somewhat higher salaries in 1956-57, the comparable raises for teachers in other states will probably increase, rather than decrease, our teacher shortage," according to Don Kline, executive secretary, Nebraska State Education Association.

Mr. Kline's comments followed announcement of a statewide survey by NSEA on *Anticipated Salary In-*



## Long-wearing "Tontine"<sup>®</sup> shades resist sunlight deterioration . . . reduce upkeep costs

**Sunlight** eventually causes all window shades to deteriorate! That's why your most economical buy is Du Pont "Tontine"<sup>®</sup>—the window shade cloth engineered to resist damage and discoloration caused by sunlight.

Reliable acceleration tests and reports from schools in all parts of the country show that "Tontine" window shades give *extra-long service . . . extra-large savings*. Replacements are held to a minimum and maintenance is simple: all it takes is soap and water to bring back the original color and fine texture. No need to fear cracking, fraying or pinholing!

Another plus: "Tontine" shades let light in, keep glare out, regardless of sun's position. No more constant adjustment—sunlight is automatically controlled to protect eyesight.

Everyone benefits when you insist on shades made with Du Pont "Tontine"—the window shade cloth of *proven value*. Available in styles for every school need.

"Tontine" is Du Pont's registered trademark for its washable window shade cloth.



**Forty weeks** under the Florida sun equals about ten years of normal use. Time after time in this punishing test "Tontine" window shade cloth proves its durability . . . extended-life economy.



**SEND COUPON FOR FREE BOOKLET**

### Du Pont TONTINE<sup>®</sup>

Washable Window Shade Cloth



BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

E. I. du Pont de Nemours & Co. (Inc.)  
Fabrics Division, N-11508, Dept. SE-66  
Wilmington 98, Delaware

Please send me a copy of your booklet "How can you measure the durability of window shade cloth?"

Name \_\_\_\_\_ Title \_\_\_\_\_

Firm \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

**NOW, USE THIS  
SANI-MISTER  
FREE...**



**FIGHT  
ATHLETE'S  
FOOT  
WITH SANI-MIST  
the new  
sanitary way**

**Makes Foot Baths and  
other methods obsolete!**

AND PEOPLE LIKE TO USE SANI-MIST, because it "refreshes" their feet. It's so clean and sanitary . . . as personal as your own toothbrush. Kills athlete's foot fungi in 30 seconds with no chance of dilution or contamination.

You buy only the Sani-Mist Solution, the spray dispenser is leased at no charge for as long as you use Sani-Mist. Write today for the name of your Sani-Mist dealer.

**SANI-MIST INC.**

Dept. SE • 1724 Chestnut St.  
Philadelphia 3, Penna.

## SPOTLIGHT

*creases for 1956-57.*

"If the present trend is allowed to continue, we will soon be teaching our children from the remnants of the national supply," he warned.

"I think the legislature should be deeply concerned about protecting the future education of Nebraska's young people."

The NSEA survey shows that sal-

aries will increase from 1 to 20 percent, with the average near the 5 percent mark.

This compares favorably with increases for the previous year. Two-thirds of the accredited and approved public schools in the state plan some salary increase for teachers in 1956-57.

The study also indicates that elementary teachers will receive slightly higher increases than high school

### Young sculptors

One Girl Scout group activity is arts and crafts—the goal is to master the art of living happily and productively.



Paul Porter

SE-243

## GLOVER HOMEMAKING UNIT

USE-TESTED FOR MODERN LABORATORIES



Two sewing machines, two pressing units, and ten storage drawers (each divided into compartments) housed under beautiful and durable 48" by 72" Micarta top with seating space all around.

**THE ONLY COMBINATION UNIT** which incorporates complete student storage with all the other features essential to modern teaching methods.

*No extra  
"tote trays"  
to buy*



**COMPACT AND ACCESSABLE** arrangement of features puts complete equipment within easy reach of every student and doubles learning efficiency. Schools where these units have been installed during the past three years have established this fact.

**NOW IN REGULAR PRODUCTION.**

If your equipment dealer does not have prices and other details, please write or telephone



**GLOVER MANUFACTURING COMPANY**  
Box 4093 Austin 31, Texas Ph. HOmestead 5-1470

# Now...

*the Erickson portable  
operates by itself  
at the touch of a latch!*



All patents  
applied for



## AUTOMATIC HYDRAULIC ACTION!

The custodian's dream! Just unlatch table... this new specially-engineered hydraulic cylinder controls unfolding automatically. One man can set up an entire lunchroom in minutes... no wasted effort.

Here are just a few of the bonus features you get with the '56 Erickson... automatic hydraulic action... tough, colorful plastic benches and tops... rugged steel understructure... extreme portability... minimum storage.

## GENTLY! QUIETLY! QUICKLY!

Only the '56 Erickson portable gives you automatic hydraulic action... and at no extra cost! Just unlatch it... the new Erickson portable operates gently! quietly! quickly! *by itself*... as if by magic!

Wheel it anywhere... unlatch it... within 2 seconds you have seating-for-eating for 24 students. You can rapidly convert any available area... such as gym, multi-purpose room or corridor... into a comfortable, orderly, colorful lunchroom... with an absolute minimum of time and labor.

**Erickson** PORTABLE FOLD-A-WAY PRODUCTS

## We'd like to show you!



HALDEAN HOMME MFG. CO.  
Dept. SE-4, 2580 University Ave., St. Paul 14, Minn.

Midway 5-6465

Gentlemen:

- ☐ We'd like a free demonstration of the new Erickson portable with automatic hydraulic action.
- ☐ Send—complete information on the new Erickson portable.

NAME ..... TITLE .....

SCHOOL .....

ADDRESS .....

CITY ..... STATE .....



## A BETTER JOB...FASTER WITH BAKER SCAFFOLDS

Housekeeping and maintenance shows up as much in your school as it does in your home . . . speedy and efficient results are gained economically with BAKER SCAFFOLDS. They take your men to the correct working height . . . even the high spots and hard-to-get-at places. Ample platforms, adjustable every three inches . . . always level, even on stairways. Ball-bearing, rubber-wheel casters. No X-bracing . . . spans desks, furniture and equipment to work in occupied areas. Get the facts on BAKER SCAFFOLDS first! Write for Bulletin 561.



Baker-Roos, Inc. SE  
P. O. Box 892, Indianapolis 6, Indiana  
Gentlemen:  
Please send full details and photos of Baker Scaffolds in action, without obligation.

Name \_\_\_\_\_  
School \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

## SPOTLIGHT

teachers.

Reports from 117 schools declare that they will need more teachers next year.

### Educational TV Programs Win Awards in 2 Contests

ANN ARBOR, MICH.—Station KQED in San Francisco became the first non-commercial television station in the United States to receive the coveted George Foster Peabody Award for "outstanding meritorious local public service by television," it was reported recently.

*The Friendly Giant*, widely-acclaimed children's program, won a first place award for the second time in Ohio State University's American Exhibition of Educational Radio and Television programs. WHA-TV in Madison, Wis., and the Educational Television and Radio Center here which presents the show, shared the award.

KETC of St. Louis and the Center won honorable mentions in the 1956 Ohio State Exhibit for *Almanac*, a nature series, and for *The Finder II*, a series designed for young people.

The Center participates in the Ohio State Awards because the national program service organization has made possible the network use of the programs.

### Russian TV Low on Style, High on Culture

COLUMBUS, Ohio—Because of the wide resources of Russian television, "it appears to have concentrated comparatively little on the creation of a special style of programming particularly adapted to the new medium," Henry R. Cassirer, Paris, head of television for UNESCO, told the third plenary session of Ohio State University's 26th Institute for Education by Radio-Television.

With nearly a million receivers located mostly in Moscow, Leningrad and Kiev, Russian TV is "primarily a form of transmission of shows created for other purposes," Cassirer said.

However, no restrictions bar the

## For Springier FLOORS



### When Every Inch of "Jump" Counts

Remember the extra resilience of J. W. Wells Diamond Hard Northern Maple is a built-in advantage that can decide any close game played on your home floor. Strip, Block, Herringbone, End-to-End, the wise pick Maple—The wisest pick Wells.



## J. W. WELLS LUMBER COMPANY

Menominee, Michigan  
Phone 3633 or 6400

# Blue Blazes

## Synthetic Cleaner

### now contains HCP!

BLUE BLAZES, the powerful synthetic cleaner, has been made *even more powerful* by the addition of HCP. The HCP ingredient activates BLUE BLAZES to provide *instantaneous penetrating action*.

**How does it work?** BLUE BLAZES, with HCP, immediately attacks dirt, oils, and any other foreign material that may be on the floor.

It penetrates grime, surrounds the particles, lifts them off the floor, and holds them in suspension until removed with a wet pickup vacuum, squeegee, or mop.

**As gentle as rain water.** It's completely safe, too. Though it overpowers dirt and grime in an instant, BLUE BLAZES with HCP is *chemically neutral* (pH of 7 in solution).

**Non-ionic.** Because it is completely non-ionic, BLUE BLAZES with HCP is able to pick up both positively and negatively charged dirt particles. Also, it leaves no film or other residue which would help create static charges which attract and hold dirt particles to the floor.

**Works in hard water or soft.** BLUE BLAZES with HCP works in any kind of water . . . cold or hot, hard or soft. This makes it ideal for all phases of floor maintenance.

Because BLUE BLAZES is a free rinsing cleaner, no hard water scum or soap residue is left behind to dull the beauty of your floors.

**You have to see it to believe it!** Ask your local MULTI-CLEAN man to demonstrate how quickly BLUE BLAZES with HCP will clean your dirtiest floor. You'll be under no obligation whatsoever.



**MULTI-CLEAN PRODUCTS, INC., Dept. SE-26-66**  
2277 Ford Parkway, St. Paul 1, Minnesota

☐ I'd like to see for myself what BLUE BLAZES with HCP can do for my floors. I understand demonstration will be free and I'll be under no obligation.

Send information on care of: ☐ Concrete, ☐ Wood, ☐ Asphalt Tile, ☐ Terrazzo, or ☐ \_\_\_\_\_ floors.

Name \_\_\_\_\_ Title \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

# MATICO

selected for another  
Important project...

SE-248



## Completely functional South Carolina school sets pace in modern school design!

MATICORK, the floor tile that simulates all the beauty of natural cork in low-cost asphalt, has been selected for use throughout the modern, pace-setting Petersburg School in Pageland, South Carolina. All classrooms, corridors, and its vast gymnasium have MATICORK® tile. And for the cafeteria and home economics room, colorful grease-proof asphalt tile was specified. Floor beauty was not the only reason for choosing Matico tile flooring! It is economical . . . costs so little to install and maintain! It resists dirt and scuffs . . . lasts for years and years, even under the heaviest traffic. And it is fire-resistant—another important reason for use in schools. If you want all the facts about MATICORK, or any other Matico product, write to Dept. 15-6, Newburgh, N. Y.

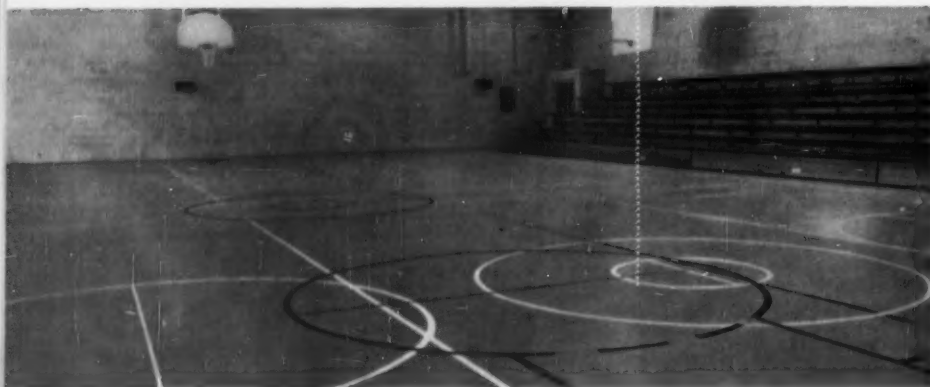
Petersburg School  
Pageland, S. C.

Architect: Lyles, Bissett,  
Carlisle and Wolfe

General  
Contractor: Harlee-Quattlebaum  
Construction Co.

Flooring  
Contractor: Hugh Prather

MATICORK Asphalt Tile (CK 981 [light]) was selected for the gymnasium floor because it offers all the warm, rich beauty of natural cork with the dependable durability of asphalt.



## MASTIC TILE CORPORATION OF AMERICA

Houston, Tex. • Joliet, Ill. • Long Beach, Calif. • Newburgh, N. Y.

Rubber Tile • Vinyl Tile • Asphalt Tile • Confetti • Aristoflex • Parquetry • Maticork • Cork Tile • Plastic Wall Tile



Grease-proof MATICO Asphalt Tile (G. P. 424 and G. P. 102) in striking combinations of green and white lends a pleasant and practical air of homelike comfort to the school cafeteria.



**Can Your  
TOILETS  
stand the  
MIRROR  
TEST?**

The odor and germs are in the crust under the rim. Hold a mirror in the bowl and see where odors come from. Sani-Tate Liquid Bowl Cleaner stops them by removing those hidden incrustations which harbor germs. It's a powerful, noncorrosive disinfectant which makes bowls completely sanitary with one application. Pleasant-smelling Sani-Tate cleans off stains and dirt with little effort, keeps porcelain brightly polished without danger of harming the surface . . . and does all three jobs at once. Saves labor, saves time and materials. Get our free Sani-Tate Mirror Card and give your toilets the mirror test which will show you why you need Sani-Tate.



**Huntington Laboratories**  
Huntington, Indiana  
Philadelphia, Pa. • Toronto, Ont.

## SPOTLIGHT

broadcast of the latest films, the opera or theatre, the sports event or concert in that country.

"The best of Moscow's cultural life is therefore put on television so that millions may see it rather than only those attending concert halls or ballet performances."

Collective reception, as contrasted with private reception in the United States, is not uncommon in a number of countries, Cassirer reported.

He gave as examples the Canadian Farm Forum, the village radio in India, educational broadcasts to Indians in South America, "teleclubs" in French villages, and TV sets in public places in Italy and Japan.

The greatest inherent purpose of television, Cassirer said, is "to join those who are strange and distant, to link the minds and knowledge of specialists and laymen, to broaden the scope of everyone's experience and to permit millions to share in the fruits of what we fondly call our culture."

This purpose affects all types of programs, he said, but added: "... I cannot conceive a real advance in programming without a similar advance in public discrimination and appreciation."

## Booklet Published on H. S. Driver Education

NEW YORK—The automobile driver is the key factor in traffic safety, and Americans must be taught "the art and science of safe driving," according to an illustrated, eight-page folder just published, entitled *What Everyone Should Know About High School Driver Education*.

"Accident statistics, blended with the modern trend toward functional education, point to high school driver education as essential training for modern living," the booklet explains.

The leaflet describes the need for the subject, its growth and its place in the public schools and covers qualifications for teachers, equipment needed, organization and cost of an acceptable course.

The folder is well suited for use in

**\* Automatically!**

**Sani-Dri  
Electric Dryers**

**\* eliminate  
needless towel costs!**

(No more buying and storing of towels)

**\* save  
maintenance overhead!**

(24-hour service—no waste to empty)

**\* clean-up  
littered washrooms!**

(More sanitary! No fire hazard!)



No. 7-A Model. See catalog for recessed foot switch and other models

**Even With Just 1 Washroom—  
You Can Save, Too!**

Savings are automatic with Sani-Dri! You eliminate 85% of washroom maintenance overhead PLUS 100% savings in towel costs. In addition, you get 'round-the-clock automatic drying service with greatly increased sanitation. Investigate this modern trend to low cost automatic drying now!



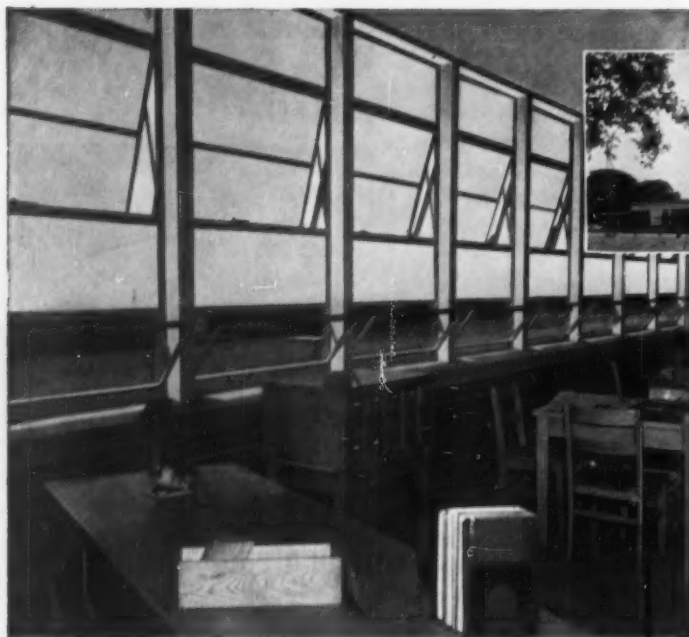
**Write Today For Latest Facts!**

Get the savings facts about Sani-Dri, the original and only complete line of dryers sold throughout the world. All models carry Underwriters' Seal and full 2-year guarantee. Write today!

**Distributors in All Principal Cities  
THE CHICAGO HARDWARE FOUNDRY CO.**  
"Dependable Since 1897"

2844 Commonwealth Ave., North Chicago, Ill.

SE-251



James Island High School, James Island, South Carolina

Architect: Augustus E. Constantine

Glazier: Pittsburgh Plate Glass Co.



## Schools Select COOLITE for Controlled Daylighting in Sidewall Sash and Skylights

Both these modern schools, located in the sunny South, are able to take fullest advantage of natural illumination through the extensive use of Coolite, Heat Absorbing, Glare Reducing Glass. Students can see without squinting, for Coolite cuts harmful glare, floods rooms with copious quantities of softly tinted daylight, diffused deep into the area by the handsome Luxlite pattern.

Awning-type windows of Coolite, providing eye-easy lighting and air circulation control in the

## MAKING THE MOST OF

# Sunshine



East Gulfport Elementary School, Gulfport, Miss.

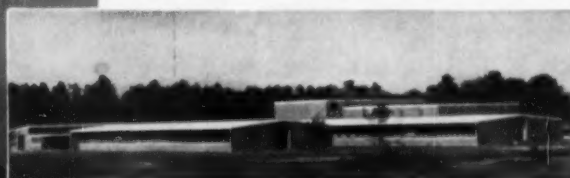
Architect: Smith &amp; Dawson



James Island High School, are combined with a lower vision strip, a window treatment fast growing in popularity. The East Gulfport Elementary School utilizes a corridor-long skylight to brighten the hall and illuminates adjoining class rooms with "borrowed light".

Coolite's heat absorbing abilities keeps interiors comfortably cool even under such wide expanses of glass. Students see better, feel better, work better under Coolite, the Heat Absorbing, Glare Reducing glass by Mississippi.

When you build or remodel your school buildings consider Coolite for quality-controlled daylighting. Available through most leading distributors of quality glass.



## MISSISSIPPI Glass COMPANY

88 ANGELICA ST.  
NEW YORK • CHICAGO

SAINT LOUIS 7, MO.  
FULLERTON, CALIFORNIA

WORLD'S LARGEST MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS

Write for free copy,  
"Better Daylighting For  
Schools". Address Dept. 16.



## SPOTLIGHT

communities considering the establishment of driver education courses or in communities wishing to provide the public with information about existing courses. It fits easily into a standard business envelope.

Reasonable quantities of the booklet are available free from Accident Prevention Department, Association of Casualty and Surety Companies, 60 John St., New York 38.

### Driver Ed Programs Rise, Benefits Many, Key Writes

NEW YORK—Driver education, being established two and one-half times more rapidly than any other program in American high schools, is the fastest-growing program in the country, declares Norman Key in *The Dividends of Driver Education*, in the April issue of *Teachers College Record*, professional journal of Teachers College, Columbia University.

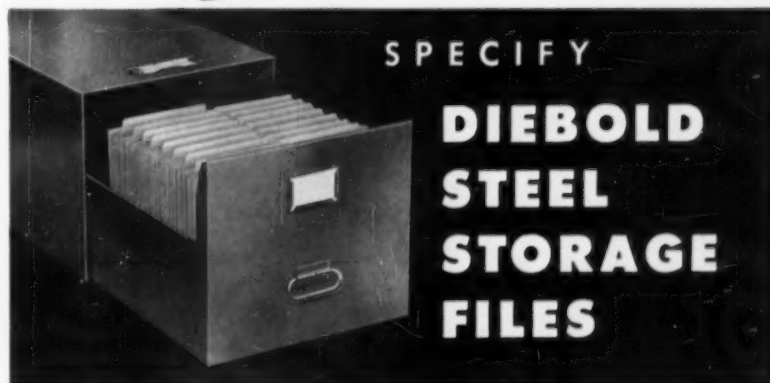
Today, 40 percent of the high schools in the United States offer some instruction in the subject, Mr. Key writes.

"Youths who have had driver education not only safeguard themselves in traffic, but influence parents who are drivers, thus making the whole family safer members of traffic society."

Mr. Key, executive secretary of the National Commission on Safety Education of NEA, lists the benefits of driver education:

1. It contributes to the overall effort, which reduces the number of lives lost in traffic accidents.
2. It costs less in terms of total cost to any community for driver education, as compared to what the same community would pay in loss of property, higher insurance rates and cost of enforcement and violator's court if drivers were not given instruction.
3. It enables the graduates of such programs to operate their own vehicles more efficiently and economically and to derive far greater pleasure from the use of their cars.
4. School administrators and driver-education teachers attest to the

## Don't be trapped by your own records!



You can get out of the trap caused by broken-down record containers when you use *Diebold steel files*. Safe-T-Stak files eliminate the "squeeze" caused by excessive replacement, space and operating costs! Diebold files provide the facilities to keep records neat and orderly for fast finding! They last a lifetime . . . increase storage room capacity up to 100% . . . AND COST NO MORE THAN FRAGILE CARDBOARD!

Ask about the magic of *sintered Nylon* a new material that makes drawers operate with *unequaled ease*. Let us prove that Diebold steel files will save you time and money! Call your local Diebold representative, or mail this coupon today.



Get all the facts . . .  
including case histories.

**Diebold®**  
INCORPORATED  
1032 Mulberry Rd., S. E.  
Canton 2, Ohio

Diebold Incorporated  
1032 Mulberry Rd., S. E., Canton 2, Ohio  
Please send complete information about Safe-T-Stak files  
and these FREE SERVICES (furnished with each order for  
100 or more units):

1. Free Installation
2. File Room Lay-out
3. Record Management Manual
4. Record Destruction Plan

Firm \_\_\_\_\_  
Individual \_\_\_\_\_ Title \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_



When you're about to buy school furniture,  
remember gentlemen . . .

**You're investing in children .**



Think hard! Can you afford to think *only* of dollars and cents when investing in school furniture? If not, then you *must* consider Brunswick. Brunswick School Furniture is as much a part of the living and learning process as the curriculum itself. *Only Brunswick* gives you color, advanced design



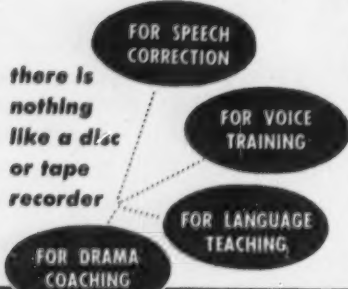
## . as well as furniture!

and function in one completely integrated line. That's why *only Brunswick* protects your investment—today and tomorrow. Know all about Brunswick before you decide. *You owe it to your children!* The Brunswick-Balke-Collender Co., 623 S. Wabash Ave., Chicago 5, Illinois.

Just one line continues to set the pace...it's

*Brunswick*

## SPOTLIGHT



...and in disc and tape recording equipment there is nothing like a

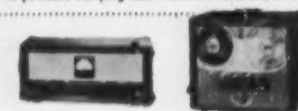
**PRESTO**  
the logical choice for school use

PRESTO disc recorders, tape recorders and recording discs are different where it counts — in their day-by-day consistency of performance, in their marvelous simplicity of operation, in their uncomplicated ruggedness. The severe wear-and-tear of school use will inevitably "separate the men from the boys" in recording equipment and prove that there is a difference when you specify PRESTO — the difference born of a quarter century's specialized manufacturing experience.



New  
**PRESTO**

**K-11 Three-Speed Disc Recorder**  
Complete and self-contained... ready for instantaneous recording and playback.  
Model K-11, with hysteresis motor, in portable carrying case \$445.00



**PRESTO SR-27 Tape Recorder**  
Professional features at a moderate price... complete with amplifier and built-in speakers.  
Model SR-27, complete in 2 portable carrying cases \$588.00



**PRESTO Recording Discs**  
Instantaneous recording and playback discs single and double-sided masters.

America's Leading Manufacturer of Disc and Tape Recording Equipment

**PRESTO RECORDING CORPORATION**  
PARAMUS, NEW JERSEY

Export Division:  
25 Warren St., New York 7, N.Y.  
Canadian Distributor:  
Instantaneous Recording Service,  
42 Lombard St., Toronto, Ont.

fact that the program contributes much to the overall development of "just good citizens."

Insurance companies have granted a substantial reduction in rates on family cars driven by qualified graduates of programs approved by state departments of education, Mr. Key reports.

Statistics prove that since its beginning, driver education has helped reduce the number of deaths per hundred million miles of vehicle travel from 15.6 in 1933 to 6.5 in 1954.

The driver-education program places the emphasis firmly where it belongs—on the correction of the human element, Mr. Key writes.

"The human element in traffic behavior and what to do about it is a problem which concerns the entire public," Mr. Key stresses in urging continued research.

As driver-education courses increase, the need for higher program standards and better qualified teachers becomes more serious, he stresses.

## Ex-Coach at Yale Joins AAHPER Staff

WASHINGTON—Howard Hobson has been appointed assistant executive secretary of the American Association for Health, Physical Education and Recreation, announced Carl Troester, executive secretary.

Dr. Hobson, who has been head basketball coach at Yale University for the past nine years, will join AAHPER headquarters staff on June 1, as consultant in physical education and boys' and men's athletics.

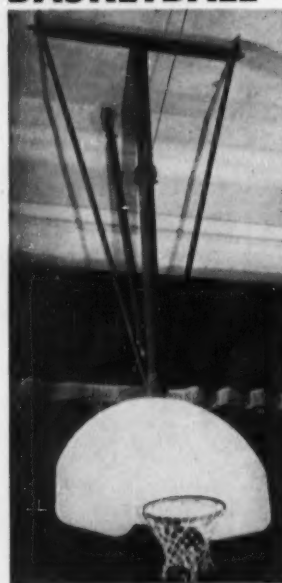


Hobson: coach joins AAHPER

In announcing the appointment, Dr. Troester said, "Howard Hobson has served for the past two years as chairman of the newly-created Men's Athletic Division of AAHPER, and has just completed a tremendously suc-

## BASKETBALL GYM—TO AUDITORIUM

### By Push Button



- Remote control—two-minute cycle, electrically operated—self breaking.
- One winch operates up to four units at one time.
- Tubular steel—light weight, three-point—Rigid—Self-locking unit.
- Back stops to fit any building or condition—Ceiling mounted, folding or stationary—Wall mounted, folding gate type or stationary.

**A BETTER PRODUCT FOR LESS**

Write today for brochure or check Sweet Architectural File 23K EA





now...a *New* resilient  
floor  
treatment  
for  
**maximum**  
**safety, underfoot**

Complete protection  
with  
complete safety.

*Now at long last . . . . .*

**"Slip Resistance" PLUS—**

**TOUGHNESS** — to withstand heavy traffic.

**RESILIENCY** — to eliminate brittleness,  
chipping and flaking.

**HARD FILM** — to guard against soft tacky surface  
that foot-marks, catches and holds dirt.

**Easy Sweeping** — no drag on mop. Soil  
and dust sweeps free.

**Stays Cleaner Longer** — Less frequent scrubbing and  
damp mopping — Dirt and dust  
will not become embedded.

**Fewer Recoatings Necessary** — Saves  
material and labor costs.

**Withstands Water Spillage** — Will not turn white.

**Lustre Buffs Back** to like new appearance.

**Traffic Lanes Patch in** without recoating entire area.

**Can Be Removed** like water emulsion waxes.

**Super**  
**Hilco-Lustre**  
**FLOOR POLISH**



*Sweeps  
Easy!*

 **ASK YOUR NEARBY HILLYARD  
MAINTAINER® to demonstrate  
SUPER HILCO-LUSTRE**

— another Hillyard First — Tested and  
Proved. The Maintainer is a trained  
floor consultant, experienced in  
solving the most difficult floor problems.  
He is "On Your Staff,  
Not Your Payroll!"

**HILLYARD**  
FOR EVERY TYPE FLOOR

**ST. JOSEPH,  
MISSOURI**  
Passaic, N. J.  
San Jose, Calif.

*In our 49th Year of Service*

**HILLYARD, St. Joseph, Mo.**

Without obligation, please have the Hillyard Maintainer  
nearest me **PROVE** that Super Hilco-Lustre is what my  
floors need.

Name \_\_\_\_\_

Institution \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

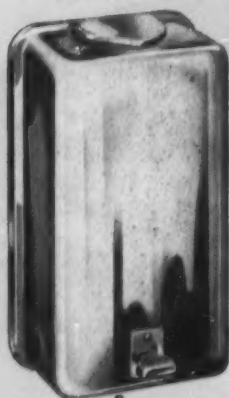
# Bobrick

IN 1906 . . . The Pioneer

IN 1956 THE LEADER

*Liquid . . . Liquid-Into-Lather . . .  
and Powder Dispensers*

*Climaxing Half a Century of  
Soap Dispenser Development*



A  
Simple  
Turn  
of the  
Secret  
Screw  
Sets It



Bobrick 33 finished in baked white enamel is identical in design and operation.

THE UNIQUE  
NEW

**Bobrick  
33CP**

**U-SET-IT MODEL**

The **UNIVERSAL**  
Powder Soap Dispenser

UNIVERSAL means that this versatile new model dispenses every variety of powdered cleanser. Fine powders and coarse; types with borax, pumice, corn meal, wood flour, even some with lanolin—the new Bobrick 33CP handles them all.

AN ENTIRELY NEW PRINCIPLE is built into the valve, operated by a "press down" stainless steel lever—rugged and unbreakable. No water spray is thrown up into mechanism by wet hands, no messy soap-clotted push-up plunger.

THE CONTAINER is of heavy gauge steel, triple plated, with a highly polished chrome finish. The hinged stainless steel lock top covers an opening big enough for easy scoop filling, yet small enough to prevent hand scooping. The Bobrick 33CP mounts flush, locked to a concealed wall plate.

**and remember:**

**YOU CONTROL THE FLOW**  
From a Pile to a Pinch

Write for descriptive circular and name of nearest Bobrick distributor, who will furnish you a returnable sample.

# Bobrick

**SOAP DISPENSERS**

1214 Nostrand Avenue, Brooklyn 25, New York  
1839 Blake Avenue, Los Angeles 39, California

## SAFEST CUTTING BOARD EVER DESIGNED . . .

**PREMIER  
ACE  
ALL-METAL  
CUTTING  
BOARD**



The new Premier Automatic Guard Rail feature affords complete protection against accidents—making the Ace All-Metal Cutting Board the safest for use in classrooms and school offices. Other features include automatic paper clamping device to keep material in position for accurate cutting . . . Hollow ground, self sharpening steel blade . . . permanently, accurately scored half-inch squares . . . rugged, all-metal construction for years of outstanding service.

PHOTO  
MATERIALS  
CO.

**PREMIER**  
quality  
products

For Complete In-  
formation, Name  
of Nearest Dealer  
Write  
Dept. 5,  
2100 W. Fulton Ave.  
Chicago 12, Illinois

SE-259

**brighter microscopic specimen  
projection with the new**

**Victor MAGNASCOPE V200**



Projects brighter  
image on movie screen



Two models  
available

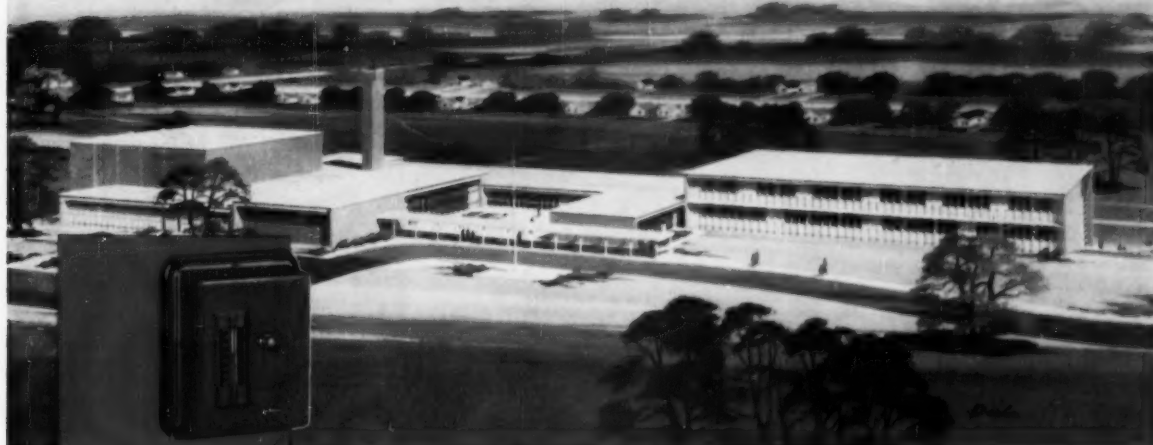
The only 200 watt microscopic slide projector available, Magnascope V200 throws brighter, sharper images on a movie screen or table top. It's highly portable, simple to operate, and blower cooled for complete safety of live and liquid specimens. Its low, compact design makes it remarkably stable—a protection against tilting or tipping. Wherever microscopes are used, Magnascope V200 will increase your group learning. Send for folder 2343 today.

**VICTOR**  
Animatograph Corporation

Dept. E-66, Davenport, Iowa  
NEW YORK — CHICAGO

Quality Motion Picture Equipment Since 1910

where there's an "after hours" heating problem...



**JOHNSON DUAL CONTROL**

## *Cuts the Cost of Comfort*

Northeast Junior High School\* is another outstanding example of the way the Johnson *Dual* System of Automatic Temperature Control solves the very special comfort problems of the modern school and provides waste-free heating and ventilating performance.

During regular school hours, sensitive Johnson *Dual* Thermostats, in each individual room, maintain ideal temperatures throughout the entire building. They operate, automatically and efficiently, the Johnson Valves and Damper Operators which control the heating and ventilating effect of convectors and unit ventilators. Refreshing, even temperatures prevail at all times, regardless of outdoor temperatures, exposure, occupancy levels and other variable factors which might otherwise affect student and teacher comfort.

When regular school hours end, each of five groups of *Dual* Thermostats is reset, from a central point, to operate at lower, non-occupancy temperatures. In those rooms that continue in use, merely pressing a button on the room's *Dual* Thermostat restores it to normal occupancy temperature, *without changing the economy settings of the other thermostats.*

Any room, or rooms—auditorium, multi-purpose room or individual classrooms—may be used independently and at minimum cost, since *only the occupied rooms are heated.* With Johnson *Dual* Control, "after-hours" heating problems are completely eliminated and, in the typical school, fuel savings quickly repay the cost of the entire system!

Johnson *Dual* Control offers the necessary flexibility to satisfy all the comfort requirements of any school

while insuring the maximum return for every fuel dollar. Whether you are planning a new school or modernizing your present building, have an engineer from a nearby Johnson branch explain how the unique comfort and economy benefits of a Johnson *Dual* System can be applied to your particular problems. Or mail the coupon today.

\*Northeast Junior High School, Johnson County, Kansas. Architects—Peterson & Scharhag, Kansas City, Mo., and Perkins & Will, Chicago. Mechanical Engineers—Howarth, Scott & Kinney, Kansas City, Mo. Heating Contractor—Interstate Heating & Plumbing Co., Kansas City, Mo.

**JOHNSON CONTROL**  
TEMPERATURE AIR CONDITIONING

PLANNING • MANUFACTURING • INSTALLING • SINCE 1885

**JOHNSON SERVICE COMPANY**

507-M East Michigan Street, Milwaukee 1, Wisc.

I'd like more facts about *Dual* Control.

- ☐ Send your folder "How Johnson *Dual* Control Solves the After-Hours Heating Problem in Schools."
- ☐ Have a Johnson engineer call me.

NAME \_\_\_\_\_

SCHOOL \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY & STATE \_\_\_\_\_

buy the desk designed for **ALL** of the children

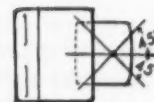


ARLINGTON NO. 552 MOVE-ABOUT DESKS



#### THE SOME-TIMES FORGOTTEN 14%\*

Because the seat swivels 45° in either direction, both left and right handed children can adjust for proper elbow rest and body support. In grades kindergarten to 12, an average of 14.7% of all students are totally or partially left handed for writing and other manual activities. For both the left and right handed, remember Arlington.



#### THE SHORT AND THE TALL AND THE IN-BETWEEN\*

In every grade, body measurements of children vary amazingly. In grade seven for example, the average height is 62.9", but the range is 52.4" to 73.4" with a standard deviation of 3.51". Why make the short and the tall suffer and only approximate the in-between, when *adjustable* equipment like this Arlington desk provides *desk and seat height adjustment* for comfort and correct posture for all.



#### ENTRANCE FROM EITHER SIDE

Modern teaching often requires the grouping of desks for project work. Arlington swivel seat plus open-side design free of interfering side frame permit entrance or departure from either side of seat.

To meet the needs of every school child and school room, see Arlington equipment. For complete information write for Catalog 56.

ARLINGTON SEATING COMPANY • ARLINGTON HEIGHTS, ILLINOIS

a reliable source of school seating equipment for over 50 years—

**Arlington**

\*based on data from "The Functional Body Measurements of School Children" published by the National School Service Institute.

## SPOTLIGHT

cessful multi-sports program at our national convention in Chicago.

"The effort is particularly directed toward increasing our nation-wide sports program and is closely related to President Eisenhower's Fitness of American Youth Movement."

### School Funds Discussed At NYU Conference

NEW YORK—How can we pay for new schools and make the best use of all school funds?

Approximately 500 educators, business men and civic leaders met at New York University recently for a one-day "Conference on Educational Finance and School Business Administration," sponsored by the department of administration and supervision at NYU's School of Education.

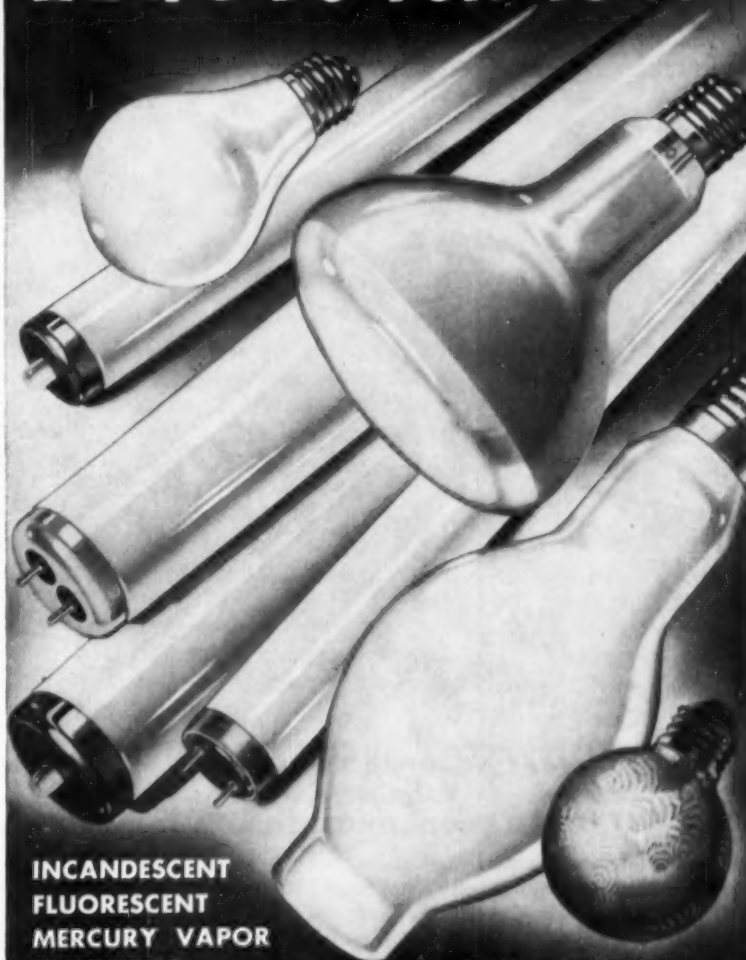
Participating were school administrators, architects, board of education members, school business managers, teachers and technicians from New York State, New Jersey and Connecticut.

Chancellor Henry T. Heald of NYU and Arvid J. Burke, director of studies, New York State Teachers' Association, delivered the main addresses on school costs and administration at the opening general session.

Speaking on educational finance at the conference luncheon were Warren G. Hill, chief, Bureau of Federal-State-Local Relations, Connecticut State Department of Education, and Maurice G. Osborne, chief, Bureau of Field Financial Services, New York State Department of Education.

The opening session was followed by individual group discussions on seven phases of educational finance—financing school plant programs, problems and practices with non-instructional personnel, problems in the preparation, presentation, and administration of the school budget, school insurance protection, problems, policies, and practices in operation and maintenance of school buildings, the role and status of the school business administrator and proposals for state certification in New York State, and broader as-

# WHAT WILL DURO-TEST LAMPS DO FOR YOU?



INCANDESCENT  
FLUORESCENT  
MERCURY VAPOR  
FLUOMERIC

© 1956 by Duro-Test Corp.

**DURO-TEST LAMPS WILL CUT YOUR LIGHTING COSTS** because they burn up to five (5) times longer than conventional lamps. Specially designed for heavy industrial and commercial uses, they give you far more light for your money. Extra-careful construction and stronger, more expensive parts have established the world-wide reputation of Duro-Test lamps' higher lumen maintenance and longer life. They cut down appreciably the need for new lamps and frequent replacement labor costs. *Give your budget a break—use Duro-Test lamps.*

## DURO-TEST CORPORATION

NORTH BERGEN • NEW JERSEY

Warehoused in principal cities for prompt shipment

DURO-TEST ELECTRIC, Ltd.  
Gurney Crescent, Toronto, Canada

# TOILET COMPARTMENT CONSTRUCTION THAT *Saves money for building owners*



*Sanymetal Junior Height Compartments installed in an elementary school.*

## Now, *Sanymetal* JUNIOR HEIGHT compartments for schools (more economical than full height compartments)

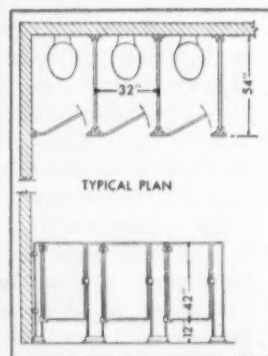
**Q**UALITY construction features, that make Sanymetal Toilet Compartments enduring and low in maintenance cost, are a necessity for school installations. Now Sanymetal offers such compartments, scaled right for kindergarten, primary and elementary grades.

These JUNIOR HEIGHT compartments have all Sanymetal construction features that make Sanymetal Compartments durable—including door panels welded, so they stay flat and in line, even if severely abused—hinges so strong that a heavy man can swing on the doors without harming the hinges—trouble-free floor connections for firm, rigid installations.

Low over-all height of Sanymetal JUNIOR HEIGHT Compartments is right for proper observation by supervisors, while affording the child privacy from other children. Their cost is lower than that of conventional full height stalls—giving you a saving from the start.

Specify Sanymetal, to be sure of getting the quality features which offer economy in installation, lasting economy in maintenance, and attractiveness.

See Sweet's, or send for Catalog 93 describing all Sanymetal Compartments. If you wish we will mail you all advertisements in this series explaining construction details that mean quality.



**TYPICAL PLAN AND ELEVATION** showing recommended dimensions.

LOOK FOR THIS



**NAMEPLATE**  
WHICH IDENTIFIES EVERY  
SANYMETAL INSTALLATION

# *Sanymetal*

PRODUCTS COMPANY, INC.

1711 URBANA ROAD • CLEVELAND 12, OHIO

6433L East Canning St., Los Angeles 22, California

**JUNIOR HEIGHT** Compartments offer standard Sanymetal features at lower initial cost

# EVERYTHING YOU WANT IN A CHALKBOARD

## Can Now Be Yours in **BECKLEY-CARDY**

### New—Revolutionary

You have never seen a chalkboard like Slatosteel! Try to mark its flint-hard surface with a coin—the coin flakes off but the Slatosteel surface is unharmed. In every test, Slatosteel comes out best.



#### Permanence

With the strength of steel and toughness of porcelain it outlives even the building. The fired green finish can never fade or wear out.

#### Legibility

The vitreous enamel writing surface cuts regular chalk crayon into clean, sharp lines that stand out strong and clear.

#### Writeability

Automatic electrostatic spraying assures Slatosteel a uniform matte surface with just the right "bite" for chalk.

#### Appearance

A perfectly even Litegreen color that adds a distinctive, modern appearance to any classroom.

#### "Plus" Service

Magnetic letters, figures and symbols provide "touch and feel" learning and magnetic clips allow use as a posting surface.

#### Ease of Cleaning

The non-porous surface erases clean with felt erasers and can be renewed by washing as often as necessary, like any vitreous enamel appliance in your home.

#### Simple Installation

Weights only 2½ lbs. per sq. ft. so sheets can be readily handled, cut to size, and installed by regular workmen without expensive special wall construction.

#### No Upkeep

The lifetime Porcenell finished sheet steel is permanent and never needs renewing or refinishing.

**Build for the future with Slatosteel—it will fit your budget.**

**Beckley-  
Cardy**

**BECKLEY-CARDY COMPANY • Manufacturers**  
1900 N. NARRAGANSETT • CHICAGO 39, ILL.

**BESELER'S**  
**VU-LYTE II**  
**OPAQUE PROJECTOR**  
**OPENS A NEW ERA FOR TEACHING**  
**EFFECTIVENESS**


**VU-LYTE II** Gives a Brighter Picture  
**VU-LYTE II** is Lighter in Weight—Smaller in Size  
**VU-LYTE II** Has the Pointex® Built-In Optical Pointer



**THIS IS AN EXCITING NEW ACHIEVEMENT IN THE WORLD  
 OF EDUCATION. HERE ARE JUST A FEW EXAMPLES OF WHAT  
 THE VU-LYTE II OFFERS:**

★ **VU-LYTE II** DELIVERS TWICE THE ILLUMINATION (140 lumens) OF PRIOR MODELS. IT GIVES A BRILLIANT IMAGE ON THE SCREEN—SO BRILLIANT THAT THE ROOM NEED NOT BE FULLY DARKENED! (A new F/3.6 lens and a new optical system make this possible.) The **VU-LYTE II**'s powerful illumination shows more detail in every projected picture, permits clear and precise understanding of the copy, gives closer communication between students and studies.

★ **VU-LYTE II** IS SMALLER, MORE COMPACT, LIGHTER IN WEIGHT. **VU-LYTE II** is portable, convenient to use in every classroom.

★ **VU-LYTE II** has the built-in optical pointer—**BESELER'S EXCLUSIVE POINTEX®**. A clear sharp arrow moves at will anywhere on the screen, attracts and keeps attention where the Teacher wants... adds just the right amount of dramatic emphasis.

★ **VU-LYTE II** has provisions to keep books and papers flat, in focus; elevation legs are individually spring loaded; the copy cooling mechanism is quiet; large rear-door opening accepts big 3-dimensional objects for projection, makes them easy to manipulate. (This lends vast new possibilities for projector use.)

★ **VU-LYTE II** has the **FEED-O-MATIC** Conveyor, another Beseler exclusive feature. **FEED-O-MATIC** automatically rolls the copy into position, automatically rolls it out as new copy enters. **FEED-O-MATIC** gives the operator smooth, untroubled performance.

Many other exclusive features make **BESELER'S VU-LYTE II** the most functional of all Opaque Projectors. **VU-LYTE II** is a magnificent new instrument for Teaching. Write Beseler for a Free Demonstration of the all-new **VU-LYTE II**. No obligation, of course.

\*Patented

  
**CHARLES Beseler COMPANY**  
SINCE 1888  
**EAST ORANGE, NEW JERSEY**



## SPOTLIGHT

pects of educational finance.

Kenneth Woodbury, assistant commissioner of education, New Jersey State Department of Education, was toastmaster at the luncheon.

R. Emerson Langfitt, professor of education at NYU, was conference chairman.

### Colorado County Adopts Teacher Awards Program

LAKEWOOD, COLO.—The school system of Jefferson County recently put into effect an incentive awards program for teachers, which County Superintendent Robert H. Johnson calls "unique."

Ten awards will be made each year to the members of the Jeffco R-1 teaching staff for outstanding service in the school system.

The awards shall consist of grants of \$250, reports Mr. Johnson, to enable teachers to further their education. Teachers may apply their grants toward summer school expenses at accredited colleges or universities.

An equivalent program, such as attending summer workshops, may be substituted, provided it meets with the approval of the superintendent and the school board.

Teachers who compete for the awards are judged by their personal and professional qualifications, which include leadership, zeal and industriousness, courtesy and friendliness, ethics and character, appearance, emotional stability, cooperation and reliability, ability to stimulate interest in learning, sympathetic understanding of children, quality of instruction, interest in professional advancement and community relationships.

The selection of the outstanding teachers follows democratic procedures, involving activity by administrators, teachers, laymen and the board of directors.

### Texas Groups Sponsor Child Development Course

AUSTIN, Texas—A Conference-Laboratory in Child Development will be held here June 11 to 15 by the University of Texas and the Texas

## SPOTLIGHT

State Department of Public Welfare.

The course will follow a Conference-Laboratory in Nursery School Operations and Procedures, June 4 to 8, and will give a more thorough study and discussion of the physical, social and emotional development of the pre-school child.

The June 11-15 program will include a series of discussions, demonstrations and observations at the University Nursery School. Group meetings and individual conferences will be held throughout each day and during several evenings.

Discussion subjects will include developmental changes in social interaction, motor coordination, emotional reactions, intellectual abilities and play activities, behavior problems (tension patterns, over-aggressiveness, teasing, etc.) and discipline.

Aim of the conference-laboratory is to learn how to meet more effectively the needs of children as individuals and as group members.

Registration information may be obtained from Norris A. Hiett, associate dean, Division of Extension, University of Texas, Austin 12.

### Arnold Named Dean of Ed School at U. of Pa.

PHILADELPHIA—William E. Arnold has been appointed dean of the School of Education at the University of Pennsylvania.

At the same time, University President Gaylord P. Harnwell announced that the School is developing its program of teacher education to meet changing conditions and needs.

Dr. Arnold, who is professor of education at the University, will succeed Dr. E. Duncan Grizzell. The latter had asked to be relieved of the duties of the deanship at the close of the current academic year, on June 30, after 34 years of service at the University.

In announcing these developments, Dr. Harnwell declared that "changing conditions require that the Uni-

SE-267

# Brulin

famous for  
**Quality  
Floor  
Maintenance  
Products**

There's a reason for Brulin's popularity with the major school systems throughout the United States. Consistent top quality of Brulin products at reasonable cost has been the outstanding reason.

*Octo Solve*, for instance, is a liquid concentrate cleaner for general purpose cleaning. It eliminates the need for a variety of cleaners and its concentrated solution permits dilution, thus reducing materially cleaning costs—

and . . . *Brulin Bright*, a rugged, slip-resistant, waxless floor finish protects floors from the wear of heavy traffic. It cleans easily, is quickly removed for new applications and assures safety . . . yet Brulin Bright is long wearing and economical to use.

There's a Brulin representative near you to demonstrate one of the many products to fit your needs, to do your job better. He'll be glad to help you . . . there is no obligation.

**BRULIN & COMPANY, INC.**

2939 Columbia Avenue • Indianapolis 7, Indiana  
1793 12th Street • Oakland 7, California

SE-266



**NONE OF THIS...**

*When they're CLOSED DECK*



**ROLL-OUT GYM SEATS**

Hussey's space-saving, exclusive "all closed" deck prevents litter collecting under the stand, thus reduces fire hazard, makes it unnecessary to crawl under the seats to recover articles accidentally dropped, eliminates the sense of insecurity many persons have in the open type of deck. They are far safer than any other known design and reduce insurance costs.

Write for FREE folder.

**HUSSEY MFG. CO., INC. 560 Railroad Ave. North Berwick, Maine**

*Ideal for Schools, Auditoriums, Armories, etc.*

# NEW LOW PRICE



## COMPLETE, DELUXE SPEEDMASTER WHITEPRINTERS

Table Model **\$1195**  
1400CT  
Floor Model 1400C .....\$1295

SpeedMaster Floor Model 1400C. Handles cut sheets or roll stock up to 44" wide, 14 ft. per min. 1500 watts, 115 v. 60 c. A.C. Size: 60"x20"x62" high plus 14" removable feedboard. \$1295

SpeedMaster Table Model 1400CT. Same as above except without storage compartments. Size: 60"x20"x33" high. \$1195

### FOR PHOTO LAB AND DARKROOM

P&H has a complete line of custom-built Stainless Steel Sinks, Tanks and Trays at stock-unit prices. Free darkroom layout service. Rotary Drum Dryers also available.



P&H Whiteprinters are available in sizes and speeds for every need and budget. Speeds from \$79.30.

REPRESENTING

**PECK & HARVEY MFG. CORP.**

5637 N. WESTERN AVE. CHICAGO 45

Progressing with the Reproduction Industry since 1937

MFRS. OF WHITEPRINT, BLUEPRINT  
& PHOTOCOPY EQUIPMENT

Approved and used by schools everywhere for economical record reproduction and blue print instruction. Now this time-saving, work-saving, cost-saving, full size floor model, ammonia-dry whiteprinter costs less than ever before! With the SPEEDMASTER anyone can quickly make exact, same-size black-line and colored-line whiteprints of any translucent original. SPEEDMASTER features synchronized printing and developing speed, with full stop and reverse control. P&H electronic drive provides instant and continuously variable speed changes.

SE-269

# MAKE FLOOR CLEANING

## FAST, EASY and EFFICIENT



Floor-King  
Mopping Outfit  
for mops to 36 oz.

... with Geerpres mop wringers. Mops last longer and do more work because Geerpres Interlock gearing lets you wring mop just the way you want it without twisting or tearing. Light handle pressure gives controlled, powerful squeezing action to force mop down and eliminate splashing.

Geerpres wringers last longer because they are ruggedly constructed of the finest materials. Electro-plated finish on all wringers is exclusive with Geerpres. Yet, they are light, compact and easy to handle on ball-bearing rubber casters.

Sizes and styles for every mopping need. Complete line of accessories, too. Write for Catalog or see your jobber.

## GEERPRES WRINGER, INC.

P.O. BOX 658

MUSKEGON, MICHIGAN

versity provide a corresponding flexibility in its teacher training program and the direction and emphasis of its efforts in this field.

"Although the School of Education will be the natural center for any program of teacher training at the University, we intend to provide for teacher education in conjunction with a number of different programs in the various undergraduate schools," he stated.

"Procedures are being studied which will enable students enrolled in the liberal arts colleges, including the Wharton School, to embrace in their program of studies such courses as will fit them to become certified teachers, well equipped for their tasks.

"At the same time, these other colleges on the campus will continue to serve students directly enrolled in the School of Education by making their courses in the liberal arts fully available to candidates for the degree of bachelor of science in education in the School of Education.

"We will continue to maintain at Pennsylvania the highest possible qualifications for admission and the traditionally high academic standards in our various curricula designed for the training of teachers," Dr. Harnwell continued.

"In addition, we are looking forward to the further development of our programs of graduate education and research—areas which offer wide opportunities for the University to make significant contributions not only to teacher training but to community service."

### Cherry, Ward Named Deans at Va., Miami

Ralph W. Cherry, University of Texas educational administration professor, has been appointed dean of the Curry Memorial School of Education, University of Virginia, effective next September.

Dr. Cherry joined the University of Texas College of Education faculty in September, 1954. He also has served as director of the school sur-

# ALL-NEW...the VACUUM line without an alibi\*



Tanks: blue or white enamel or porcelainized finish, also stainless steel. Wheels: caster or dolly.

## **\*every model does everything!**

American engineering now brings you an amazing all-new line of Vacs that are so advanced in features and performance they can be sold to you without an alibi!

No more need to settle for a part-job vac . . . or buy too big a model for your job to get all the features you require. With American—every model does *everything*! 14 basic models . . . 3, 9, 12, and 55 gallon. Each one, regardless of size, will do *all* cleaning jobs . . . wet or dry . . . floors, rugs, off-floor cleaning . . . a Vacuum of correct size and performance for every commercial establishment, every budget! Feature by feature, it outperforms, outlasts! Write today for an on-the-job demonstration entirely without cost or obligation.

Lincoln Auto Scrubbers for completely automatic floor cleaning produced by Lincoln-Schluter Floor Machinery Co., a subsidiary of American.

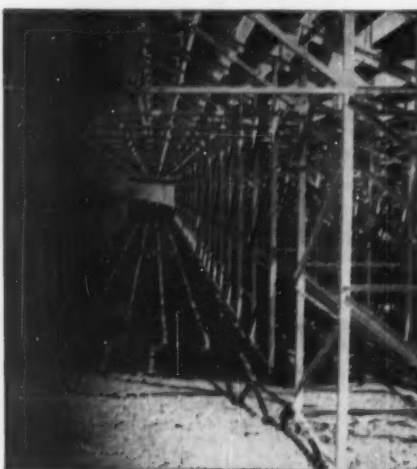


performance proved maintenance  
machines . . .  
world-wide sales and service

**THE AMERICAN**  
FLOOR SURFACING MACHINE CO.  
ESTABLISHED 1900

549 So. St. Clair St., Toledo 3, Ohio

## "Towers of Strength..."



- portable
  - sectional
  - permanent
- GRANDSTANDS  
BLEACHERS**

The "tower type" construction on the Snyder all steel grandstand illustrated, insures long usage and safe seating.

Easy to install, designed so additional sections can be added, and planned for future installation of shower facilities this Snyder Steel Stand is safe, economical and practical.

If you are considering a similar installation or need help in planning, consult our engineers. They will gladly help you with your grandstand or bleacher problems.

For further information write:

### SNYDER TANK CORP.

P. O. Box 14, Buffalo 5, N. Y. • P. O. Box 2390, Birmingham 1, Ala.

SE-272

## PAGE FENCE

America's First Wire Fence—since 1883



• You need a fence if the children lack protection against common hazards. And you certainly want time-tested quality in the safeguard you provide. Whether you choose heavily galvanized Copper-Bearing Steel, corrosion-resisting Aluminum, or long-lasting Stainless Steel, PAGE Fence is quality controlled from raw metal to rugged fence erected on metal posts deep-set in concrete. Available are 8 basic styles, varied by heights, types and sizes of gates, and top rails. Finally, your PAGE Fence will be expertly erected by a reliable, technically trained firm permanently located in your vicinity. For important fence data and name of nearest PAGE firm—

*Write to PAGE FENCE ASSOCIATION in Monessen, Pa., Atlanta, Bridgeport, Chicago, Denver, Detroit, Houston, Los Angeles, New York, Philadelphia or San Francisco.*

PRODUCT OF PAGE STEEL & WIRE DIVISION OF AMERICAN CHAIN & CABLE COMPANY, INC.

## SPOTLIGHT

veys and studies office.

He was formerly school superintendent at Owensboro, Ky.

Effective September 1, 1956, Douglas S. Ward, now acting dean of the School of Education, University of Virginia, Charlottesville, will serve as dean, School of Education, Miami University, Oxford, Ohio.

Dr. Ward has occupied positions in National Education Association, and U. S. Office of Education.

He came to the University of Virginia in 1951 from the University of Illinois.

### Superintendent-elect



Eric R. Baber, superintendent, Rich Township High School, Park Forest, Ill. since 1951, will resign next month to accept an appointment as superintendent-elect, Waukegan Township, Ill., Secondary Schools. He will work with retiring superintendent Clarence Pritchard during 1956-57.

### Henry Stresses Human Values in Education

PEORIA, Ill.—President David D. Henry of the University of Illinois recently told a meeting of the state PTA that "every parent has a stake in the State University, for it represents an opportunity for the child's later development.

"Whether or not the child takes advantage of that opportunity, the existence of the University is a major influence upon his life, upon his

THE SCHOOL EXECUTIVE

## SPOTLIGHT

attitudes, his hopes, his aspirations."

Discussing his speech topic *Translating the Statistics*, Pres. Henry pointed out, "In discussing the new numbers of students in our schools, we are inclined to define our tasks statistically, but a statistical measure is an inadequate one."

"How many are a million chil-

dren? How many are a thousand? When one's own son or daughter or friend is involved in a marginal or debatable decision, the statistics are even less meaningful.

"Education deals in human values above all other considerations, and concern for the individual and his welfare must remain the measure."

"The weakness in our discussion of school problems has been our

### Milk machines

First graders at McKinley Elementary School, Toledo, Ohio, wait with teacher Jacqueline Mitchell to purchase bottles of milk from automatic vending machine in school corridor.



Because PLAYTIME engineered athletic field seating stresses superior design . . . structural safety . . . durability and long-life through **HOT-DIP Galvanizing** (after fabrication)—it's the logical choice of athletic officials and school administrators who consider **QUALITY** in a product equally as important as the price.



Get the facts on **PLAYTIME** seating today. Send for **FREE** descriptive literature and investment analysis information.



SE-273

SE-274

## FOR BETTER REGULATED SCHEDULES

**Standardize on Far-a-matic Clock and Program Systems**

Now you can combine the most advanced mechanical features with distinctive modern design. The attractive, compact appearance of *Far-a-matic* Clocks harmonize with any room decoration.

- The two-wire automatic reset control mechanism provides accuracy to the second.
- 24-hour spring reserve maintains program schedule during power interruptions.
- Not affected by other equipment on lines.
- Backed by 75 years of specialized experience and continuous research.
- Years of trouble-free service with minimum maintenance.



### FLUSH CLOCKS

Plugs into a pre-wired, permanently installed wall outlet. Standard sizes—10", 12", 15"

### DOUBLE DIAL CLOCKS

For ceiling or sidewall mounting with exclusive Far-a-matic plug-in feature. Standard sizes—10", 12", 15"



### SKELETON CLOCKS

Supplied with back box for easy installation. Choice of standard or special markers. Standard sizes—16" and 24"

### HYGIENIC ILLUMINATION

New Sperti lighting fixture blends incandescent and ultra-violet light to produce artificial daylight . . . destroys germs . . . safeguards health.



Write today for complete information.

**Sperti Faraday Inc.**

Engineers in Sound and Sight Since 1875  
Adrian, Michigan

## SPOTLIGHT

failure to comprehend the human terms involved, the intangibles in human relations. We talk about 'bulges' in enrollments; we refer to the 'tidal wave' of students; we count classrooms and chairs as if 'keeping school' were the same as 'teaching school'!"

Speaking on the role of the State University, President Henry called it "a symbol of the public concern for the welfare of the individual; it is an index to the hope that he too may learn how to grow, develop, prepare for any opportunity for which he is capable."

"Parents can take no narrow view that the State University is of concern to them only when their children are enrolled. Its welfare, quality, integrity, achievement are a part of the heritage we must hold for all of those who may have need for its services," he said.

"Even for those who do not at-

tend, the University must be available so that the decision not to come or to go elsewhere is a free choice, not one of economic selection or limited alternatives."

### Film Describes Work of Citizens Advisory Group

DETROIT—A 16 mm. sound film has been produced which tells how one community used citizens advisory groups to plan the kind of school buildings needed by the community.

Released by the Audio-Visual Materials Consultation Bureau, College of Education, Wayne University, *Schools for Tomorrow* was planned with the cooperation of the Department of Educational Administration of the college. It is sixteen minutes long with sound, and available in both black and white and color.

Romulus, Mich., like many other American cities, faced the need to plan and build new schools for an expanding community. The film tells how a citizens advisory committee

worked with the school superintendent and his staff, a school building consultant, and a school architect in planning the kind of schools the people of the community wanted.

### Time Grants \$ to Colleges Where Employees Study

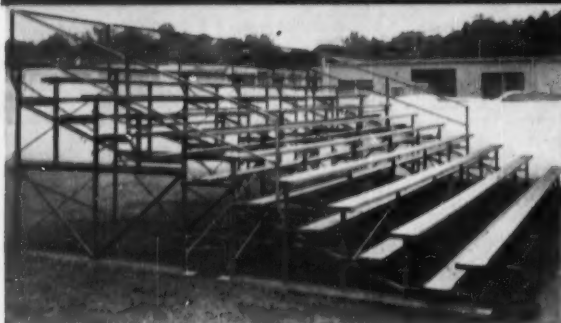
NEW YORK — Unconditional gifts totaling \$23,562 will be allocated to 30 colleges and universities where *Time* Inc. employees have recently completed after-hours courses, Roy E. Larsen, president of the publishing company, announced recently.

The system of grants, known as the Tuition Refund Plan, contributes a sum matching the total tuition paid by company employees. Inaugurated last year on an experimental basis, the plan has now been made a permanent part of *Time*, Inc.'s contributions program.

The grants supplement the Education Benefit Plan, begun in 1953, which provides that *Time* pay half an employee's tuition.

SE-275

## Here's Real ECONOMY in a Safe, Roomy, Portable Steel Bleacher!



Standard 10-Row "Budget Master" Bleachers



Standard 5-Row "Budget Master" Bleachers

### SKID-MOUNTED SECTIONS CAN BE MOVED WITHOUT DISASSEMBLY

ARE YOUR CROWDS bigger than your seating budget? Safe, roomy BUDGET MASTER steel bleachers can seat your spectators at a remarkably low investment! Close production controls and design advantages make this possible.

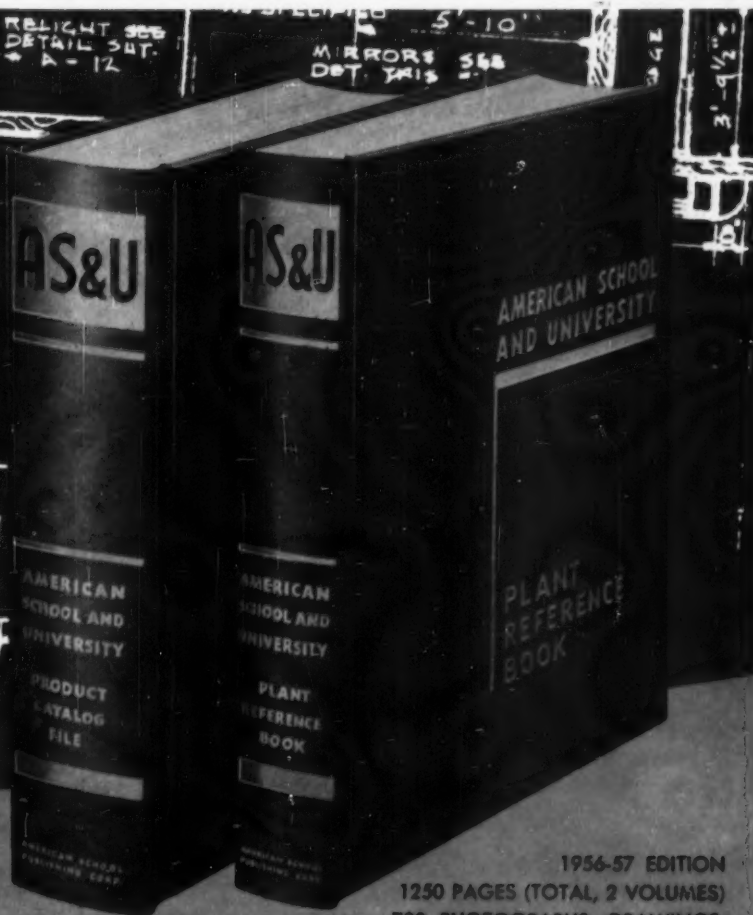
Full visibility and comfort are engineered into each 6 ft. long section—built 5 or 10 rows high, with guard rails optional. Sturdy all-steel framework insures complete safety. Mounted on skids, lengths up to three sections (18 ft.) can be relocated without disassembly. Larger installations are erected by unskilled help without tools.

Seat crowds from 20 to 5,000 persons or more... use BUDGET MASTER bleachers outside or indoors... move them whenever and wherever you need them... divide the sections for smaller crowds. You will find dozens of uses for this versatile equipment! Learn how BUDGET MASTER bleachers can stretch your budget to seat more people...

Write for free Bulletin 46



# blueprint for better schools at lower costs!



1956-57 EDITION  
1250 PAGES (TOTAL, 2 VOLUMES)  
700 PHOTOGRAPHS, DRAWINGS,  
DIAGRAMS, RENDERINGS, DETAILS  
TWO-VOLUME SET, \$7.00

This 28th annual edition of AMERICAN SCHOOL & UNIVERSITY provides the basic information which is the cornerstone of any sound program of financing, building, operating and maintaining school or college plants. From preliminary planning to completion of the building, this reference work contains the best current thinking and practice on problems common to every school project.

Here are 66 articles, reports and case studies written especially for AS&U readers by prominent educators, architects and planning consultants. They get down to brass tacks on the problems confronting all school planners. For example, AS&U explores methods of raising funds, explains factors dictating choice of site, weighs relative merits of single level versus multi-level school plants and shows how to determine minimal needs of space, equipment and facilities. AS&U spotlights vital new trends in physical design. Armed with these practical data, school planners can avoid the costly mistakes which wreck so many building budgets.

## What Does a Good School Cost?

The answer, as AS&U shows, is far less than a bad school. Careful planning can save thousands of dollars of upkeep expense—at no great sacrifice of quality. AS&U explains many effective cost-cutting measures: the low-perimeter plan-form, the use of multi-purpose rooms, newly-developed high-speed construction techniques, comparison of costs of construction, plus a survey of ways and means of reducing maintenance time and expense.

AMERICAN SCHOOL AND UNIVERSITY should be the point of origin for any school building program—whether for elementary, secondary or college buildings. Its ideas and information are the blocks upon which better schools can be built and administered for less money.

The New 2-Volume

1956-57

AMERICAN SCHOOL & UNIVERSITY

Puts at Your Fingertips

All Key Phases of . . .

SCHOOL PLANT PLANNING

COST-SAVING CONSTRUCTION  
METHODS

CHOICE OF DESIGN & MATERIALS

FINANCING AND BUDGETING

ADMINISTRATIVE METHODS

OPERATIONAL TECHNIQUES

LOW-COST MAINTENANCE

OPERATING EQUIPMENT

AND SUPPLIES

28th Annual Edition  
Now in 2 Volumes

For the first time in its 28-year history, AS&U is now being issued in two volumes. In order to accommodate the growing fund of excellent reference data, we have placed all editorial content in the Plant Reference Book (Volume I) and buying information on products and equipment in the Product Catalog (Volume II). Both volumes are indexed for easy reference.

Advance reservations for the 1956-57 AS&U are already heavy and the number of sets available is limited. To make certain of your set, be sure to return your advance reservation today.

## Guaranteed Reservation...

AMERICAN SCHOOL & UNIVERSITY  
470 Fourth Ave., New York 16, N. Y.

**AS&U**

Please reserve my copy of the 1956-57 two-volume edition of AS&U, for delivery to me as soon as it is off press. Bill me \$7.00.

Date:

Save me 30% this year and every year! Enter my standing order for the annual AS&U. Bill me for the new and future editions at 30% off the list price.

NAME .....

TITLE .....

SCHOOL OR FIRM .....

ADDRESS .....

CITY ..... ZONE ..... STATE .....

# WASHINGTON SCENE

news from the Capital affecting education

## Final WHC report

The White House Conference on Education moved into history the first part of April when the 34-member Committee made its final report to President Eisenhower.

The report was submitted in a package of three compartments: (1) the Committee's own statements and recommendations; (2) the report of the White House Conference at the close of the December, 1954, meeting, along with certain minor revisions and an important dissent or two offered as a minority report; and (3) a summary of the reports submitted by the 53 state and territorial conferences called by the respective governors.

The Committee's recommendations and conclusions were prefaced by a glowing tribute to the schools, not only as "the chief instrument for keeping this nation the fabled land of opportunity it started out to be," but also as a means of enabling "free men to rise to the level of their natural abilities."

The schools were given credit for "the fullest flowering of the long western tradition of emphasizing the dignity of the individual."

Recommendations were advanced with caution, especially in the area of financial support, emphasizing a short-time, emergency program rather than a long-range one extending into the foreseeable future.

While the Committee embraced with enthusiasm a concept of education designed to fit all children for fruitful adult lives, it cautioned that "in attempting to do everything a little, schools may end by doing nothing well."

Pointing out that school funds are limited and that the student's time will always be limited, it urged that quality not be lost in the "rush" for a great number of courses of study. While holding that education should

be extended to all the children of all the people, the Committee also emphasized the importance of meeting the needs of gifted children.

The Committee called upon the American people to study carefully their systems of school organization and consider measures to deny funds, other than local, to districts which do not, after a reasonable time, organize on an efficient basis.

It insisted there is no excuse for the existence of 8,674 school districts which operate no schools. It offered that fact as a dramatic example of the need for reorganization, and pointed to a need just as urgent for studies in large cities, with the purpose of finding ways to decentralize large urban school systems so that they might be more responsible to the will of the people.

The Committee statement indicated impatience at the slow pace of essential reporting from local school districts and state departments of education to a central agency, naming the U. S. Office of Education as the appropriate one.

Various responsible estimates, said the Committee, place the nation's school building between 200,000 to nearly a half-million additional classrooms by 1960. "Inadequate communication between local school districts and state departments of education is the chief cause for these contradictory figures."

Recognizing that the shortage of good teachers is as serious as the shortage of buildings, it asked that every effort be made to recruit members of the profession, and to utilize the services of available teachers more effectively.

The report calls for adequate salaries and for a revision in teacher preparation programs as well.

Another statement called for a White House Conference on Higher Education comparable to the one just concluded on the needs of ele-

mentary and secondary schools. The Committee urged that the interest and activity of citizens in school affairs, aroused by the conferences held in the last eighteen months, be maintained by effective programs of advisory groups and by organizations of parents and teachers.

Statements of exception to the White House Conference report are reviewed on page 92.

## Hopeful horizons

The optimism of the White House Conference Committee in predicting that there would be enough teachers eventually is substantiated by the recently completed annual teacher supply and demand study of NEA.

This shows that the number of potential new teachers graduating from college in June, 1956 scores a 10 percent increase over the June, 1955 total. The NEA study reports 96,079 teachers will be qualified next fall for classroom positions, but warns that many of them will be detoured from the route to the school-room by opportunities in other types of positions.

By November, 1955, 71 percent of the qualified teachers graduating in June had actually entered the profession. The figures ran nearly as high as 82 percent for elementary school teachers.

The high school story was different. Seventy percent of the qualified English teachers found jobs in schools, but the percentage of prepared chemistry teachers who enter school laboratories in the fall was slightly under 47 percent.

The NEA report calls attention to the fact that if all of the teachers graduating next June entered teaching, the deficit would still be approximately 80,000. Any prediction, therefore, that the teacher shortage will be solved must be made on a long-time basis.



# BUSINESS EDUCATION NEWS

UNDERWOOD CORPORATION

SERVING EDUCATORS EVERYWHERE

ONE PARK AVE., NEW YORK

## Underwood Supplies Last Longer

**Economical, new carbon paper and ribbons give crisper impressions and twice the wear**

New Underwood *Distinctive* Silk Ribbons and *Manifoldo* Carbon Paper mean top value for business schools because they are made to last longer—even when subjected to hard, daily typing in classes and school offices.

Schools find Underwood *Distinctive* Silk Ribbons more economical because they're extra long, (up to six yards longer than most cotton ribbons), extra strong, and they give crisp, clean impressions without "filling in." That's because only the highest quality, silk fabric is used to make Underwood *Distinctive* Silk Ribbons.

You'll like working with Underwood *Manifoldo* Carbon Paper be-



cause it is easy to handle, specially treated to prevent curling, yet doesn't "tree" or slip on the platen. You get sharp, clear copies every time and there are five smudge-proof weights to choose from.

Why not try Underwood Corporation *Manifoldo* Carbon Paper and Underwood Corporation *Distinctive* Silk Ribbon in your school, now. Fill in the coupon and mail it today!

**It's vacation time...**



... so relax, enjoy yourself and have a happy summer. Best wishes from all of us at Underwood—we'll see you again in September.

### Did you know?

The first commercially produced typewriters were understroke or "blind writing" machines, so called because the type bars struck upward and imprinted on the underside of the platen. The first front stroke, visible writing machine was produced by Underwood in 1895. Since this development, every new typewriter placed on the market has followed the Underwood front stroke principle.

**For more information, mail this coupon today!**

Dr. Earl G. Nicks, Manager,  
Business Education Division, Dept. SE6  
Underwood Corporation  
One Park Avenue, New York 16, N. Y.

- ☐ I'd like to try Underwood *Manifoldo* Carbon Paper.  
☐ Underwood *Distinctive* Silk Ribbon.

Name and Title.....

School.....

School Address.....

City..... Zone..... State.....

# Medart

telescopic gym seats\*

## better gymnasiums deserve better seating

**MORE SAFETY**—Four double vertical uprights per row put the spectator load directly on the floor, not the casters or walls.

**MORE STRENGTH**—Self-supporting, free-standing steel understructure does not depend on wood members for strength.

**MORE ROOM**—22" or 24" row depths, plus under-seat clearance provides more toe, heel and leg room.

**MORE VISIBILITY**—10½" or 11½" row rise makes seeing easier.

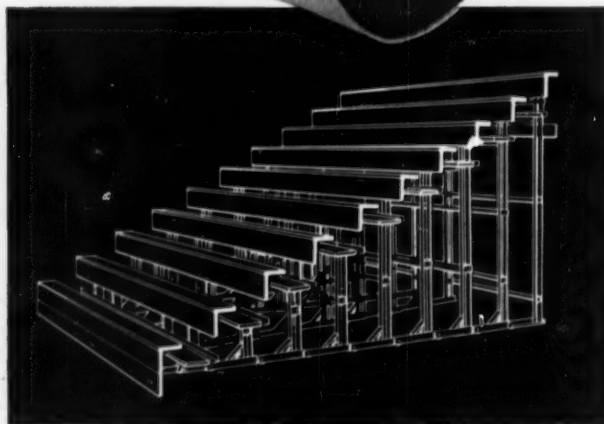
**LESS EFFORT**—Free-floating, interlocked roller housings and supports under seats make Medart Seats easiest of all to open and close.

Write for **NEW** catalog



SPECIFY the best, then INSIST on it!

FRED MEDART PRODUCTS CO., INC., 3534 DEKALB, ST. LOUIS 18, MO.



\*Medart Telescopic Gym Seats are fully protected by U.S. Patents

IT'S NEW!  
LOWER  
COST!

LONGER  
LAMP  
LIFE!

# VERD-A-RAY SEE-E-ZEE FLUORESCENT LAMPS

IT'S DIFFERENT!

MORE  
LIGHT!

LESS  
GLARE!

FACTORY TO YOU!

BUDGET TERMS!



The new SEE-E-ZEE non-glare lamp designed for schoolroom lighting has proven its outstanding superiority by scientific test . . . sharpens and clarifies everything the eye sees . . . without strain. SEE-E-ZEE fluorescent lamps deliver intense light without glare . . . all difficult seeing tasks are made easier . . . carries an 18 or 24 month free replacement guarantee. Available in all standard wattages and sizes.

## SENTRY AIR THERMAL STARTERS

The only permanent fluorescent starter on the market! SENTRY Air Thermal starters increase fluorescent lamp life up to 154% . . . designed for over 20,000 one-cycle starting operations . . . unconditionally guaranteed for two years.

## INSTRUCTOR FIXTURES

Tests show that "Instructor Series" fluorescent lamp fixtures provide reading efficiency and maximum brightness prescribed by The American Standard Practice for School Lighting. Available in all sizes.



### 5000 HR. CORRIDOR LAMPS

Put an end to high maintenance costs in corridors, aiseways, exit fixtures, stairways, illuminated signs, and hard to reach sockets with Verd-A-Ray's 5000 hour corridor lamps . . . designed to deliver 5000 hours of general lighting service . . . burning in any position . . . available 10 thru 100 watts.



### 2500 HR. SILVER BOWL (Indirect Lighting)

For classroom or hallway . . . the Verd-A-Ray Silver Bowl lamps create a wide upward beam and indirect, glareless, shadowless lighting . . . available in 100 thru 1000 watts.



### 2500 HR. GYMNASIUM LAMPS

For general lighting . . . hard to reach locations . . . gymnasium, assembly halls . . . conditions too tough for ordinary lamps . . . Verd-A-Ray Durad lamps will give long, uninterrupted service . . . available 300, 500, 1000 and 1500 watts.

*Write today for Verd-A-Ray's Tailored Lighting information:*

1. Verd-A-Ray's liberal introductory "look-see" offer on See-E-Zee fluorescent tubes
2. Other Verd-A-Ray lamps and starters.  
Free planning and engineering services by experts for conversions or new installations . . . fluorescent or mercury vapor lighting (indoor or outdoor) and sports field lighting.  
Entails no obligation on your part.

SEE-E-ZEE Lamps ☐ Instructor Fixtures ☐  
Sentry Starters ☐  
General Purpose Lamps ☐

Verd-A-Ray Corporation  
515 Front St., Toledo 5, Ohio

Send lighting proposition data.

Number of Buildings \_\_\_\_\_ Number of Rooms \_\_\_\_\_

School \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

Your Name \_\_\_\_\_

Title \_\_\_\_\_

Verd-A-Ray has high potential territories open for full or part time qualified representatives.

# PROFESSIONAL LIBRARY

recent publications the school administrator will want to read, to pass along to associates, or "to have heard of"

## Fundamentals of Educational Leadership

By C. A. Weber and Mary E. Weber, *McGraw-Hill, New York, 1955, 265 pp., \$4.50.*

In clear, direct style for easy reading and reference, the authors have synthesized the major American concepts of democratic leadership. Asserting that "democratic control, like freedom, is something which must be learned" and "management is not synonymous with leadership," they challenge educators to be consistent with the avowed purpose of democratic administration.

The efficient product of democratic processes is the man with an idea or plan of action; thus leadership is largely situational. It calls for skill in the order of attack or "principle of least controversy." Imagination is "uniting the familiar with the new" and data gained by facing realities demands analysis or simplification. Status leadership is justified because "group decisions must be enforced"; but to achieve group participation and teamwork is an acquired art.

—WALLACE H. STREVELL  
Chairman  
Department of Administrative Education  
University of Houston

## An Adventure in Education: Connecticut Points the Way

By Fred M. Hechinger, *The Macmillan Company, New York, 1956, 266 pp., \$3.75.*

As Norman Cousins, chairman of the Connecticut Fact Finding Commission on Education, says in his introductory commentary, "This book is a report about a report."

One of the country's crack journalists, well versed in educational matters, records the highlights from some seven volumes compiled by 38,000 citizens of Connecticut in the course of several years' study of their public school system. The book,

while based on reported facts, is not confined to them. Mr. Hechinger adds balanced interpretation and penetrating comment.

The progressive-traditional issue, the development of democratic responsibility, stimulation of creative powers, improvement of the quality of human relationships, dilemma of the high school, unhappy status of vocational schools, parents' ideas about good teachers—these are some of the perennial problems which are given new meaning by quotations from the original reports or by the author's fresh analysis.

—A. JOHN HOLDEN, JR.  
Commissioner of Education  
State of Vermont

## Teaching World Affairs in American Schools

By Samuel Everett and Christian Arndt, *Harper and Bros., New York, 1956, 270 pp., \$4.00.*

The role of the United States and its relationship with the peoples of the rest of the world will continue to assume our major attention. In a world so filled with tension where human relationships determine whether it will be world of peace or a world of conflict, we must provide greater systematic attention to ways of cooperative living and action. Schools must continue to assume responsibility for orienting pupils to the variety of societies and cultures.

The John Dewey Society under the editorship of Samuel Everett and Christian O. Arndt has developed a case book on teaching world affairs. Within this very readable text are accounts of specific activities which have been developed in elementary, secondary, and college classrooms in the United States. Additional experiences are related pertaining to adult education, such as, clubs, forums and conferences involving definite community action. This is not the theory story of "what" should be done in

the classroom but rather the accounts of "what has been done" with people of all ages. Genuine concern was felt for obtaining classroom practices involving all instructional areas.

—LAWRENCE O. HAABY  
Professor of Education  
University of Tennessee

## You and Your Child

By Winifred De Kok, *Philosophical Library, New York, 1955, 147 pp., \$3.75.*

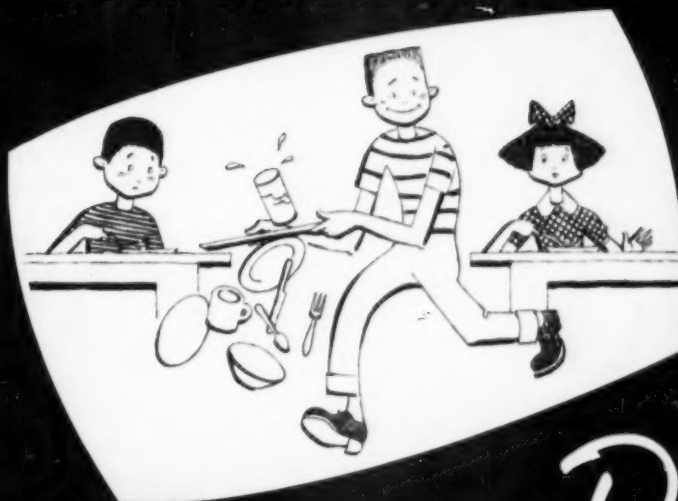
Dr. De Kok has written a concise, clear exposition of relationships between parents and children and of how children mature into free individuals. Her many years experience is evident in her fine presentation. She writes with discernment and ease, addressing herself to mothers; but her wisdom can be directed to fathers and other adults dealing with children as well. Her book has added charm to this reviewer, for Dr. De Kok is so evidently British in her expressions and in her references to education.

England has had presented for its consideration a plan that would care for its people "from the womb to the grave." This author is not that ambitious—she takes the reader from "conception through adolescence." She carefully selects and cites some of the most crucial areas in childhood for closer scrutiny. Though some of her solutions for help in analyzing serious problems in children are too pat and uncomplicated, the discussion of sex education is masterful.

*You and Your Child* can bring assistance to parents and happiness to children if the author's philosophy is accepted and applied.

—AMELIE ROTHSCHILD  
Executive Assistant  
New York State Citizens  
Committee for the  
Public Schools  
New York City

## In School Cafeterias...



...breakage cut 94% with

# Dallas Ware

*A five-year record of 12,000 meals daily shows breakage cut 94% . . . over 90% saved in replacement cost . . . and labor costs reduced substantially.*

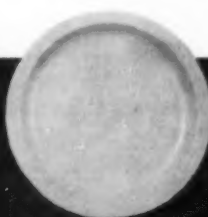
That's why more and more schools use Dallas Ware, an attractive dinnerware molded of melamine. It practically eliminates breakage, chipping and cracking, leaving extra money to be used where needed more. And Dallas Ware offers many more advantages of special interest to schools. Just look. —>



TRIPLE DUTY  
DALLAS WARE

### COMPARTMENT TRAYS

Available in either 6 or 4 compartments



TEXAS WARE

For full information write to

**PLASTICS MANUFACTURING COMPANY**

825 Trunk Avenue Dallas, Texas

1  
simplifies serving problems

2  
retains heat

3  
less noise

4  
lightweight, easier to carry

5  
takes abuse

6  
speeds up dishwashing

7  
safer, no broken glass in  
washing, or food

8  
unharmful by boiling water  
and detergents

9  
stacks easily

10  
cleanses easily and  
completely, more sanitary



*In warm and sunny weather, students in schools without cafeterias can enjoy nourishing lunches out-of-doors, packed in containers and bags by lunchroom personnel.*



*When emergency conditions make lunchroom facilities inadequate for serving hot plate lunches, try . . .*

## Type A Lunch in a Paper Bag

By RUTH WALKER

Director  
School Lunch Department  
Oakland, California

RECENTLY, school lunch personnel in Oakland, California took a hard look at school kitchen and cafeteria facts. They realized that ten years would elapse in this age of skyrocketing enrollments before lunchroom facilities could be constructed and operating in the remaining 33 of Oakland's 83 public schools now without them.

The problem, then, became one of how to make a good nutritional program available to all, not just to a part of the school population, and to do this in the face of limited equipment, facilities and space.

At the present time, children in the 50 schools with lunchrooms can purchase Type A lunches at a cost of 25 cents in the elementary schools and 30 cents in the high schools. This program, a \$750,000 operation, has been self-sustaining.

How could the students at the remaining 33 schools also have the

chance to buy Type A meals? "A" lunches packed in paper bags, prepared at schools having kitchen facilities and then transported to those lacking them, offered a possible solution. Preliminary study of this idea by members of the School Lunch Department seemed favorable, and a workshop was arranged to introduce it to the entire staff and PTA representatives.

The overall plan, as presented at the workshop, was to select five or six school kitchens, located at strategic points throughout the city, each to serve five or six schools not having lunch facilities. Cold lunches-in-a-bag were to be prepared in these kitchens, right along with the regular hot lunch preparation, and the bag lunches transported to the schools within their service radius.

A part of the workshop time was spent on menu study, to show how a typical week's hot lunch menus

created by the world's  
most celebrated designers!

# Bolta TEMPO-TRAYS

the first fashion-decorated trays

Feast your eyes! Patterns to brighten and blend with surroundings . . . glowing colors to entice the appetite. It's Bolta's distinctive new TEMPO-TRAYS, proud product of America's leading manufacturer of Food Service Equipment.

Fashioned exclusively by world's leading designers, TEMPO-TRAYS combine the same outstandingly durable qualities found in other famous Bolta trays.



"CHINA SHOP" by George Nelson\*



"PAVEMENTS" by George Nelson\*



"TERRAIN" by George Nelson\*



"CHAIN" by Paul McCobb\*

**GENERAL PLASTICS**

THE GENERAL TIRE & RUBBER COMPANY  
BOLTA PRODUCTS DIVISION  
LAWRENCE, MASSACHUSETTS

\*Designed for the STIMULUS collection of Schiffer Prints.

Visit Our Booth D-55, National Restaurant Show, Navy Pier, Chicago • Specify Boltaflex for booths and furniture, Bolta Wall for interiors



Carpenter Body Works, Inc.  
Mitchell, Indiana



Southern Div.,  
Superior Coach Corp.  
Kosciusko, Mississippi



Superior Coach Corp.  
Lima, Ohio



Perley A. Thomas  
Car Works, Inc.  
High Point, Carolina



Ward Body Works, Inc.  
Conway, Arkansas

## Top of the class—Ford School Bus Chassis

**Tops in safety features**—meets and often surpasses N.E.A. Safety Requirements. New blowout-resistant tubeless tires and Lifeguard steering wheel are standard equipment.

**Tops in daily operating economy**—Ford's '66 Short Stroke engines develop up to 26% more power. Pistons travel shorter distance at slower speeds—less power waste, less wear, greater gas savings. 5 proven Short Stroke engines, from the 133-h.p. Six to the mighty 175-h.p. V-8. (4 wheelbase lengths with capacities up to 66 passengers.)

**Steering gear safety**  
—for max. load and speed, exceeds N.E.A. standards.

**Strong front bumper**—can withstand enough shock without permanent distortion to meet N.E.A. standards.

**Long-life springs**—stationary eyes of front springs protected by wrapper, meet N.E.A. standards.

**High front axle rating**—for safe support of maximum load, exceeds N.E.A. standards.

**Double-action front shock absorbers**—exceed N.E.A. standards.

**Big fuel capacity**—fuel tank has minimum 30 gallon capacity, meets N.E.A. standards.

**High-capacity rear axle**—full-floating type rear axle exceeds N.E.A. standards.

**Fuel safety**—flexible fuel and oil-proof connections at engine meet N.E.A. standards.

**Full-load power**—climbs 3% grade at more than 20 m.p.h., exceeds N.E.A. standards.

**Non-whip drive shaft**—metal guard protects each section, meets N.E.A. standards.

**Cushioned ride**—wide-span progressive rear springs exceed N.E.A. standards.

**Tire dependability**—front and rear tires are of same size and ply rating to meet N.E.A. standards.

**Quick braking**—to stop vehicle within 22 feet at 20 m.p.h., exceeds N.E.A. standards.

**Powerful braking power**—1,000 cu. in. capacity brake vacuum reservoir meets N.E.A. standards.

**Write today:** Ford Division of Ford Motor Company, P.O. Box B-3, Dearborn, Michigan, or see your dealer.

## FORD TRUCKS LAST LONGER



Onida Products Corp.  
Canastota, New York



Hackney Bros. Body Co.  
Wilson, North Carolina



The Wayne Works  
Richmond, Indiana



Blue Bird Body Co.  
Fort Valley, Georgia



Excel Body Corp.  
Durant, Oklahoma

## LUNCH

could be translated into acceptable Type A cold lunches without necessitating buying or handling two entirely different groups of supplies. In three out of five menus, the food selected for the hot entree can be used for lunch-in-a-bag sandwiches and many other items can be duplicated in either lunch.

After establishing to everyone's satisfaction that Type A cold lunches would present no menu problem in the hot lunch kitchens, workshop time was devoted to actual preparation and packaging of the suggested lunch menus to streamline the operation and ascertain the approximate time-labor costs involved. Many short cuts were discovered in these experiments, such as the square rather than the diagonal cutting of sandwiches for quick and compact fitting into paper bags. The extra time per employee for preparation of the lunches-in-a-bag, sufficient to service 33 schools, was figured at 2.4 hours.

Next step in the workshop program was to calculate costs of supplies needed. An itemized list was made, including estimated prices for quantities of straws, napkins, four-ounce paper cups, cup lids, paper bags and wooden spoons. Total costs were then adjusted to allow for labor costs and reimbursement for each "A" lunch, and an average cost of eighteen cents per lunch was arrived at.

The eighteen cents per lunch figure was gratifyingly below the twenty cents lunch charge that had been agreed upon as a goal, and left a comfortable margin to take care of transportation costs.

A method of transportation had not as yet been worked out, but it was agreed at the workshop that volunteer service on the part of the PTA or any other group should not be used for as extensive an operation as this. It was felt that a thorough study should be made of possibilities and that transportation definitely be contracted for on a commercial basis. Further investigation revealed that transportation costs could be figured at less than

1 cent per lunch.

Shortly after the workshop was held, situations came about in two schools that called for emergency measures. At the Montclair Elementary School, two-thirds of the lunchroom was converted into two classrooms to relieve over-crowding and avoid the complexities of a change to a double-session curriculum. This left just one-third of the space formerly available for serving approximately 300 children and 30

faculty members daily. The answer to this situation was to inaugurate a paper bag service. The bags are handed out from the double line service counters in the one-third remaining of the lunchroom, and the lunches are then eaten in the classrooms.

Much has been learned from this operation, which was started last January. For example, it was thought necessary, at first, to adopt cold lunch menus. It was soon suggested,

SE-283

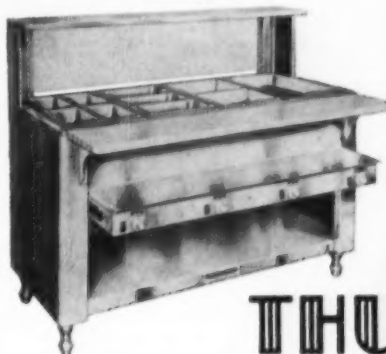


## I LIVED IN A WORLD OF MAKE-BELIEVE

until I realized the hot food in my water-pan steam table stayed moist longer with the covers on the food containers.

I had thought the water in the water-pan was supposed to keep my food moist, but how could it? It couldn't get through the sides or bottom of a solid metal container. And it certainly couldn't get in through the top... especially with the covers on.

Right then I decided to do a little investigating—and I found out it's the temperature control that counts. In fact, each kind of food must be kept at a particular temperature to preserve its flavor and appearance best. So—



## NOW I DEPEND ON THURMADUKE TO KEEP MY HOT FOOD BEST

It isn't where the heat comes from, it's the amount of heat that counts. That's why Thurmaduke Waterless Food Warmers are made with separate thermostatic heat regulators in each heavily insulated food compartment. Repeated tests have shown that various foods keep best at different temperatures, ranging from 125° to 180°, depending on the kind of food.

DUKE MANUFACTURING CO. Dept. T-66  
2305 NO. BROADWAY, ST. LOUIS 6, MO.

Please send complete information on  
☐ Cafeteria Counters ☐ Food Warmers

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY AND ZONE \_\_\_\_\_ STATE \_\_\_\_\_

Only

SE-284



## FOOD MIXERS Offer You All These Advantages

### Type "N" 12 quart Bench Model

(also available in  
Floor Model)



- Sturdy Construction
- Longer Life
- Tilted Bowl
- Single lever, one hand control
- Speed changes without stopping
- Easy to clean
- Unusual Power

### Type "N" 20 quart Floor Model

(also available in  
Bench Model)



### Other Triumph Mixers

Triumph also manufactures a complete line of larger mixers to fit every requirement.

### Triumph Accessories,

Available for all Triumph mixers include meat grinder, vegetable slicer, juice extractor, etc.

Write for Information



**MANUFACTURING  
COMPANY**

3400 SPRING GROVE AVE.  
CINCINNATI 25, OHIO

## LUNCH

however, that six-ounce, paper, hot food containers with lids could be used to package any of the hot dishes formerly served on plates in the lunchroom. The kitchens are now preparing exactly the same food for paper bag service that had been served when full lunchroom facilities were available.

The cost of supplies—including paper bags, six-ounce paper hot food containers with lids, four-ounce paper cold cups with lids, straws, wooden forks and spoons and napkins—averages .039 cents per lunch. This would appear to be a sizeable additional cost, but much of this is cancelled out by savings elsewhere.

Although there is more advance preparation required for wrapping and packaging of the items for the bag lunches, considerably less time is required for handing out paper bags than is used in plate service, and cleanup time is reduced to almost nothing. Once the bag service was established it was found that

one less helper was needed. This amounted to a saving of three and one-half hours in wages, plus the cost of the helper's lunch and the paperwork involved in keeping an employee "on the books." The saving here is figured at .017 cents per lunch, which can be subtracted from the supply cost.

When it is further considered that the present lunchroom force can handle up to 500 lunches as compared with a top of 300 plate services handled by the former larger staff, it appears that the unit cost of bag lunches may well go below plate service once a maximum output is reached. But whether or not paper bag service proves to be more economical than plate service, the important point, in the opinion of the School Lunch Department, is that the lunch-in-a-bag service *makes it possible to continue a highly important nutritional program* regardless of the curtailment of facilities.

The importance of publicizing a new program properly was demonstrated at Montclair. Although the

SE-285



## COMPARTMENT TRAY

**AND STACKING CUP**  
Speeds up Serving,  
Cuts down Breakage!

Like the trays used by airlines! Proton compartment trays keep lunchroom lines moving swiftly . . . cut time and labor costs in the cafeteria. Proton, fine-quality molded Melmac,® is light and easy to handle. Won't break. Can be washed in dishwasher and boiling water. Stacks in small space.



## PROTON PLASTICS DIVISION

Pro-phy-lac-tic Brush Co.  
Florence, Mass.



New Stacking Cup

THE SCHOOL EXECUTIVE

paper bag service was announced and went into effect immediately following the conversion of the lunchroom without any curtailment of service, parents had assumed that full lunches would no longer be available. Pupils brought their own lunches and the sale of lunches was cut almost in half during the first two months.

When it was explained via the neighborhood newspapers that the lunchroom had been curtailed in space only and not in service, and when mimeographed menus were distributed in the classrooms for the children to take home to their parents, the demand was soon back to normal. But a needless loss had been incurred and a lesson learned.

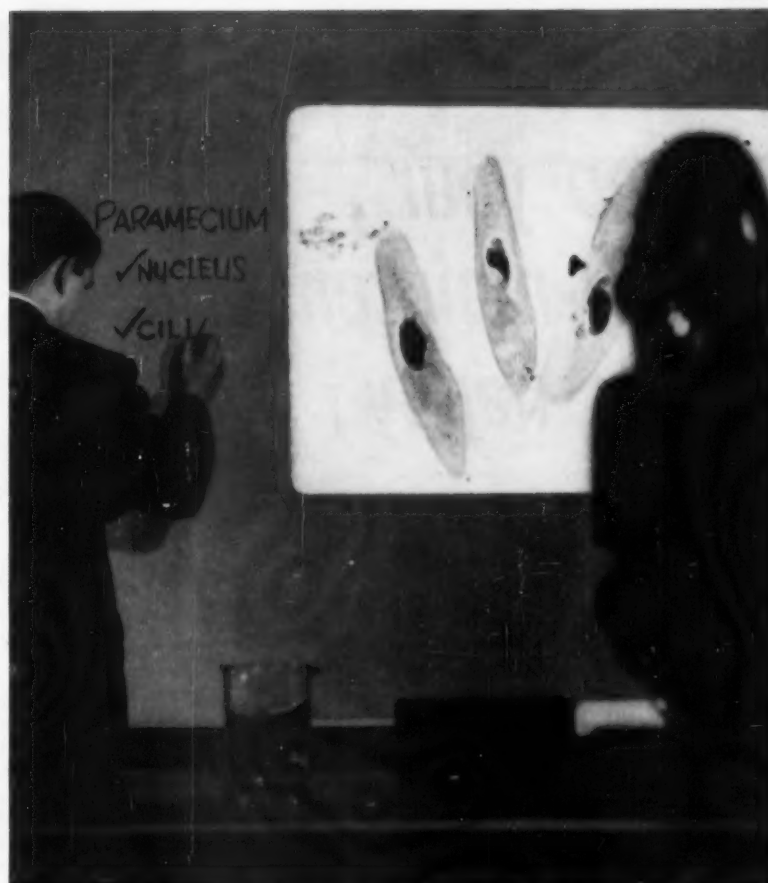
The second situation that brought about an "emergency" tryout of paper bag lunches occurred at Castle-mont High School, where an order restricting students to the campus at the noon hour doubled the demand on lunchroom facilities. It was impossible to serve and seat all the students wanting to buy lunches, and again, the Type A paper bag lunch saved the day.

#### Prepared in kitchens

The bag lunches are prepared in the kitchens and distributed at a snack bar on the school grounds. They have proved popular with the students because the quick service gives them more time for lunch hour recreation and the freedom to eat out of doors or wherever they please on school grounds.

What are some of the sample menus, following Type A specifications, that have been successful in bag lunches? One favorite is cheese mixture sandwich with cabbage and apple salad and sprig of grapes, and graham cracker and peanut butter sandwich for dessert. Another is devilled egg sandwich, waldorf salad, tomato wedges and cherry cobbler. A third favorite is tuna sandwich with fruit jello, carrot and celery stick, tomato and cookies.

One-third quart of milk is served with all lunches. The salad is packed in six-ounce paper cups. The four-ounce size is used for cobblers and fruits with juice.



Movie of a microscopic animal is projected on Weldwood Chalkboard. Biology instructor supplements movie with chalked notes and magnetic displays. Dark blue chalk on gray board is extra easy to read.

## New "teaching wall" takes chalk, shows movies, holds magnetic teaching aids

A wall of new gray Weldwood Chalkboard helps schools and training classes save on equipment, on floor space, on teachers' time—and students learn more.

**What it is.** Unique Weldwood Chalkboard consists of a porcelain-on-steel face\* bonded to strong, rigid plywood, and backed by a sheet of aluminum. It never needs refinishing, will never shatter, buckle, warp or break. It's guaranteed for the life of the building in which it is installed.

**As a superior chalkboard**—its velvety surface prevents chalk "squealing" and allows easy writing. Easy reading, too!

**As an ever-ready projection screen**—gray Weldwood Chalkboard ends the need for bulky movie and still-projection screens. Whole wall for a screen gives fine viewing from any seat, any angle.

**As a magnetic visual aid board**—charts, display cards, bulletins, even actual materials can be quickly fastened to the board with small magnets.

**Like to know more?** Ask your architect (he'll find details in Sweet's) or send coupon. To see Chalkboard, and the Weldwood line, including paneling and doors, visit any of our 87 offices in principal cities.

\*Porcelain faces by The Bettinger Corp.

  
**Weldwood®**  
**CHALKBOARD**

A product of  
**United States Plywood Corporation**  
Weldwood—The Best Known Name in Plywood  
In Canada: Weldwood Plywood Ltd.

**United States Plywood Corporation**  
Weldwood Building,  
55 West 44th St., New York 36, N. Y.

Please send me complete details on new gray Weldwood Chalkboard (No. 221-U) **LS 6-56**

NAME.....

ADDRESS.....

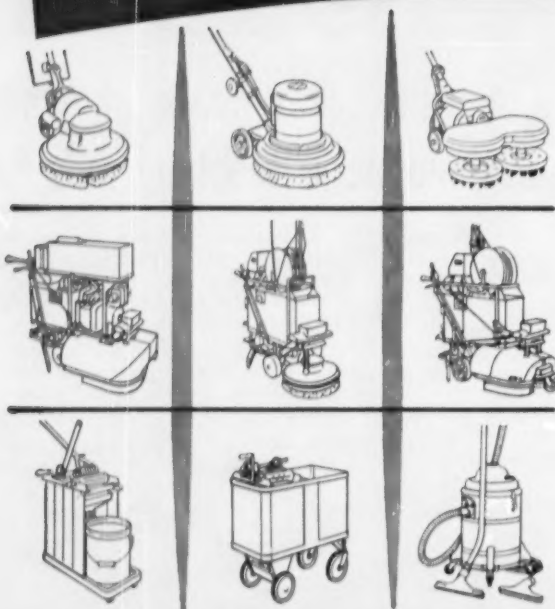
CITY.....STATE.....

Keep your  
floor-maintenance  
men happy...



with *Job-Fitted* EQUIPMENT!

Choose from the **COMPLETE** *Finnell* Line  
More than a score of models and sizes  
permits selection of the equipment  
that's exactly right for your job!



However much a maintenance man may want to do a good job, and at the same time show savings in labor costs, he's stymied if the machine is too small, or too large, or is otherwise unsuited to the job. Different floors and areas call for different care and equipment. That's why *Finnell* makes more than a score of floor-maintenance machines. From this complete line, it is possible to choose equipment that is correct in size as well as model... that provides the maximum brush coverage consistent with the area and arrangement of the floors.

*Finnell* makes *Conventional Polishing-Scrubbing Machines* in both concentrated and divided-weight types, each in a full range of sizes... a *Dry-Scrubber*, with self-sharpening brushes, for cleaning grease-caked floors... *Combination Scrubber-Vac Machines* for small, vast, and intermediate operations, including gasoline as well as electric models... *Mop Trucks*... *Vacuum Cleaners* for wet and dry pick-up, including a model with By-Pass Motor. In addition, *Finnell* makes a full line of fast-acting *Cleaners* for machine-scrubbing... *Sealers* and *Waxes* of every requisite type... *Steel-Wool Pads*, and other accessories — everything for floor care!

In keeping with the *Finnell* policy of rendering an individualized service, *Finnell* maintains a nation-wide staff of floor specialists and engineers. There's a *Finnell* man near you to help solve your particular floor-maintenance problems... to train your operators in the proper use of *Finnell Job-Fitted Equipment and Supplies*... and to make periodic check-ups. For consultation, demonstration, or literature, phone or write nearest *Finnell Branch* or *Finnell System, Inc.*, 3 East St., Elkhart, Ind. Branch Offices in all principal cities of the United States and Canada.

**FINNELL SYSTEM, INC.**

*Originators of Power Scrubbing and Polishing Machines*



BRANCHES  
IN ALL  
PRINCIPAL  
CITIES

# New Product / Reviews

The key numbers (SE —) which appear at the head of each product review and advertisement in this issue are also listed on the yellow mailing card that is bound in this section. For further information on any product, simply circle on the card the key number for that product and mail the card to us.

## BUILDING PRODUCTS

See also page 144

### Decorated Porcelain SE-401 Panels

*Designs are Permanently Fired*



Porcelain enamel panels add a decorative note to school buildings. Renderings of the artistic design are permanently fired into the porcelain-enamel-over-steel panels which will never fade or weather. The panels (both decorated ones and those under the canopy) are furnished in numbered sequence, in exact specified sizes, ready to install.

DAVIDSON ENAMEL PRODUCTS, INC.,  
Lima, Ohio.

## CLASSROOM EQUIPMENT

See also page 148

### Fluorescent Lamp SE-402 *Doubles Light Output*

A new fluorescent lamp with double the light output of present tubes of equal length has been developed by General Electric. Called the Power-Groove, the new tube features a series of lengthwise dents, or grooves along one side of the 8' long unit. This design permits a maximum circumference of the tube while constricting its inside area.

The greater light output results from an increase in area of the lighted tube surface, the higher wat-

tage at which the new tube can be operated, and the more effective use of energy within the tube.

GENERAL ELECTRIC, Nela Park,  
Cleveland 12, Ohio.

## TEACHING MATERIALS

See also page 152

### TV Camera SE-403 *Becomes Study Hall Monitor*



General Precision Laboratory, Inc., has installed a closed-circuit television-study hall monitoring system in the New London (Wis.) High School to relieve teachers of study hall duty. The system consists of a 9" TV camera weighing only 5 lbs., its lens trained on the 100 seats in the second floor study hall. The 17" TV monitor is located in the school's general office on the first floor. Coaxial cable, concealed in the ventilating ducts in the walls, connects camera and monitor. The Superintendent's and Principal's secretaries keep an eye on the monitor while doing their office work. The school's public address system links the study hall and the office.

GENERAL PRECISION LABORATORY,  
INC., Pleasantville, N. Y.

## FOOD SERVICE

See also page 156

### Coin Counter SE-404 *Counting Speeded 23%*

The Klopp Model-DE Coin Counter has been redesigned to step up its coin counting speed 23%. It now delivers 45 coins per second (2700 per minute) with 100% accurate count. This is approximately 15 times as fast as sustained counting by hand. This same machine also delivers the coins at high speed into wrappers for deposit.

KLOPP ENGINEERING, INC., 35551  
Schoolcraft Rd., Livonia, Mich.

## OTHER NEW PRODUCTS

See also page 164

### Riding Mower SE-405 *Climbs Hills Easily*



The Lawn Cruiser is a rugged riding mower, combining a full 32" cut with extreme mobility and unusual hill climbing ability. It has such outstanding new features as a front discharge, side trim, low center of gravity, and short turning radius. It features the Suction-Lift Rotary Scythe cutting principle which lifts the blades of grass, then shears them uniformly thus minimizing matted down spots and wheel tracks.

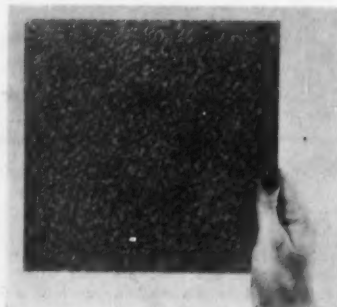
THE DEVERE Co., Racine, Wis.

## BUILDING PRODUCTS

### Vinyl Wall Tile SE-406 in New Random Cork Pattern

A new Random Cork Pattern is now available in Pre-pasted Bolta-Wall vinyl tile. Each box of tile contains light, medium, and dark shades.

The tiles are available for do-it-yourself as well as professional installation. They are especially easy to apply and require no paste, adhesive, tacks, or nails. The user simply wets the back with water and presses



the tile on wall or ceiling. Available in 8" x 8" size, the tiles are easily cut with scissors and tailored to fit any wall area.

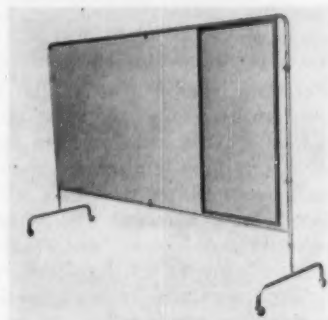
BOLTA PRODUCTS, Div. of The General Tire & Rubber Co., Lawrence, Mass.

### Water Control Valves SE-407 Prevent Water Waste

Dole Flow Control Valves can be used in almost any application where the control of water flow is required. The pressure limitations are from 15 psi to 125 psi. The valves will continue to function at pressures beyond these ranges, but accuracy is impaired. Water temperatures in excess of 160°F. should be avoided.

THE DOLE VALVE CO., Plumbing and Heating Div., 1933 Carroll Ave., Chicago 12, Ill.

### Portable Partitions SE-408 Solve Space Problem



The Foldcraft Portable Partition is light in weight, moves easily on heavy-duty swivel casters and can be used with a combination of partitions to form as many separate rooms as may be desired.

Panels are of smooth, tempered hardboard framed in heavy-gauge tubular steel for extra strength. They are available in 4', 5', 6', 8' and 10' lengths. Height is adjustable from 5' to 6'.

Adjustable side brakes on casters can be set in a few seconds to make the partition completely stationary. One side of the panel is treated for use as a chalkboard. A handy bulletin or tack board which can be readily moved from one end of the panel to the other is an added feature.

FOLDCRAFT Co., Mendota, Minn.

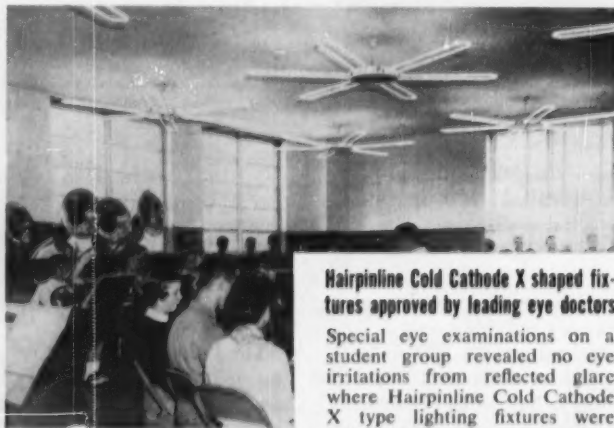
### HAIRPINLINE Cold Cathode lighting fixtures do not create glare and sharp shadows which cause eyestrain



High brightness hot cathode tubes in louvered fixtures shoot light rays straight down, creating reflected glare and dark shadows. Neither photograph retouched.



A low brightness Hairpinline Cold Cathode X type fixture covers 64 sq. ft., approx. Light comes from four directions, creating almost no shadows or reflected glare.



#### Hairpinline Cold Cathode X shaped fixtures approved by leading eye doctors

Special eye examinations on a student group revealed no eye irritations from reflected glare where Hairpinline Cold Cathode X type lighting fixtures were used. These fixtures not only help save the students' eyes, they save money. Less current is used, maintenance costs are reduced and they last longer. ONLY Hairpinline Cold Cathode lights are GUARANTEED for three years.

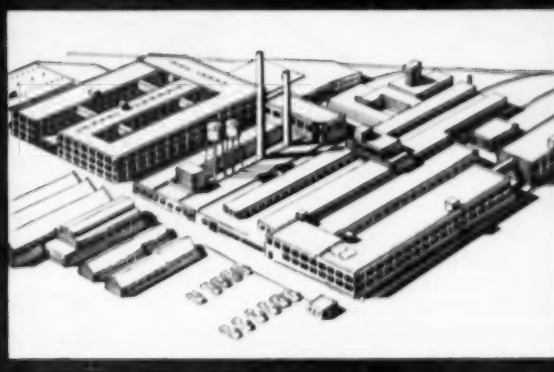
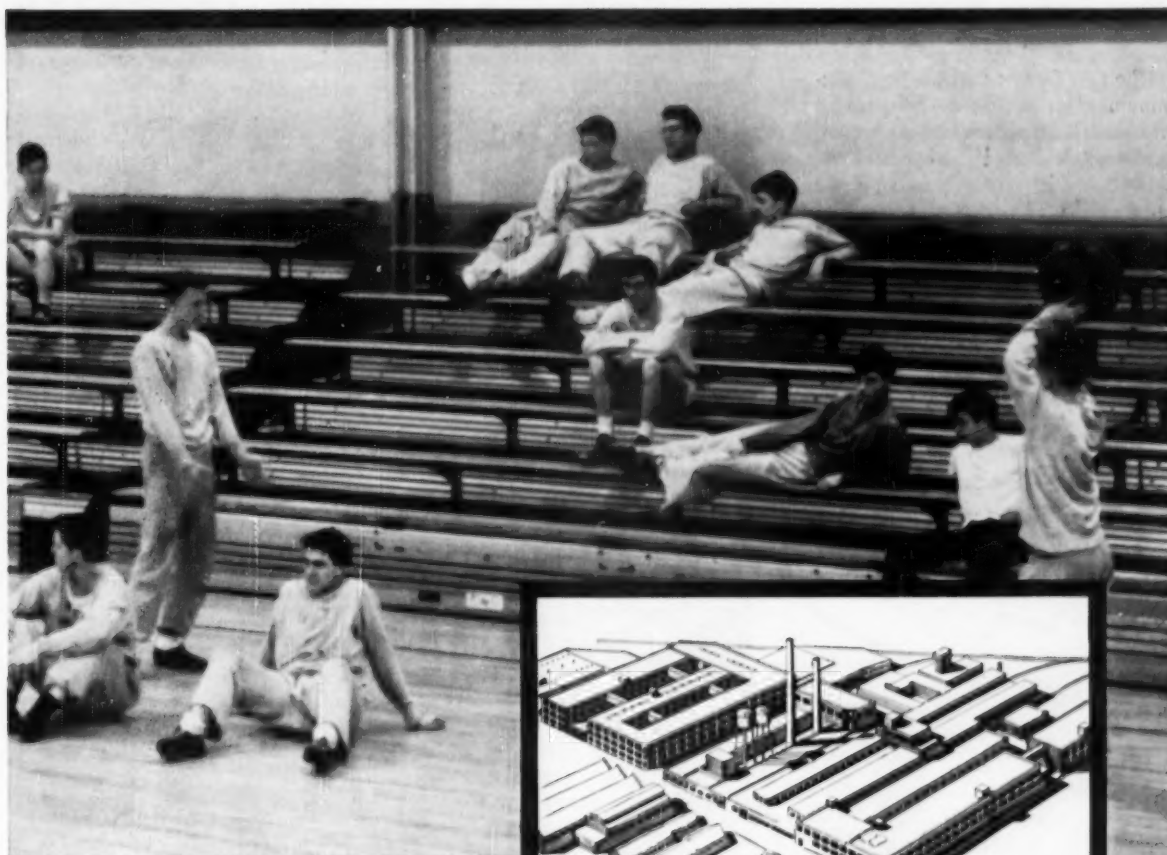


Send for fact-filled booklets, name and address of our lighting engineer nearest you.

**ILLUMINATING ENGINEERING CO.**

2347 E. NINE MILE RD., HAZEL PARK, MICH.

## Exclusive with Brunswick-Horn Folding Gym Seating



## Complete factory control of all board manufacture

All three Brunswick-Horn factories contain the most up-to-date facilities to assure you the finest, most efficient product.

Brunswick-Horn (and only Brunswick-Horn) controls the complete manufacture of seat boards within their own plants.

Both flush and grooved type boards are edge-laminated for greater strength, safety and durability. Lumber is flat sawn, kiln dried, re-sawn and turned to provide edge-grain strength. Pitch pockets, bad graining, and knots . . . all defects are rejected! Selected stock is electronically

glued under pressure. Hand sanding and finishing complete the operation.

Rail type boards are also available to allow free circulation of air where wall ducts exist.

Have your Brunswick-Horn representative explain why these, and other exclusive features, make Brunswick-Horn your best investment in gymnasium seating. Call him today. He will be glad to arrange a meeting at your convenience.

See SWEET'S <sup>22 J</sup>  
Ho

THE BRUNSWICK-BALKE-COLLENDER COMPANY  
Horn Division • Marion, Virginia



## BUILDING PRODUCTS

### Glass Sliding Doors SE-409 Are Weatherized

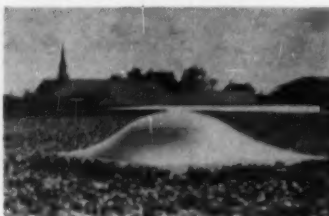
The new Lynart "all weather" aluminum glass sliding doors come in two models: the Standard to accommodate 7/32" or 1/4" plate and the Custom which readily adapts to either 1/4" or 1" stock size insulated glass. Both are weatherized by double-surfacing wool pile, which gives positive assurance of dual seal around the entire perimeter of vented areas.

LYNART, INC., 2320 Centinela Ave., W. Los Angeles, Calif.

## Skylights

SE-410

### Double Dome Makes Unit Leakproof



Designed to better interior lighting without increasing the cost of lighting, Consolite Skylights offer features entirely new to skylight design. Made of fiber-glass reinforced

thermosetting plastic, Consolites combine all the basic functions of a skylight in a double dome. This dome gives top insulation and ideal light diffusion; it prevents condensation drip and is important to the leakproof qualities of the new skylight.

Fiber-glass reinforced thermosetting plastic has great structural strength and is still lightweight—it will not shatter, crack or break under normal use.

CONSOLIDATED GENERAL PRODUCTS, INC., Post Office Box 7425, Houston 8, Texas.

### Building Panel SE-411 Glass Fiber Reinforced Plastic



Granitized Corrugulux is a glass fiber reinforced plastic building panel which will last up to six times longer than ordinary plastic panels. Skylights, sidelights and window panes of this new material will be more economical, longer lasting, and better looking.

The granitizing process produces a surface evenly sparkled with minute facets of tough polyester which protects the glass fiber reinforcements more thoroughly than ordinary manufacturing processes. The new jeweled surface provides an additional advantage by creating a turbulent cleansing action from rain or hosing. There are no sharp ridges to impede the cleaning or to serve as dirt catchers.

LIBBEY-OWENS-FORD GLASS FIBERS CO., CORRULUX DIV., P. O. Box 20026, Houston 25, Tex.

SE-290

*Folding Tables are NOT all alike!*

**SMOOTH, SANITARY TOPS of Masonite Presdwood, Linoleum, Fir or Birch Plywood, Formica and Resilyte**

**TUBULAR STEEL FOLDING LEGS** **FOLD UNDER FOR STORAGE**

**QUICK, EASY SET-UP ★ FOR CHANGING ROOM USES**

**NO other tables have as many "Extra Features" as Mitchell FOLD-O-LEG tables**

- ★ GREATER SEATING CAPACITY
- ★ MORE LEG COMFORT
- ★ UNEQUALED APPEARANCE, DURABILITY, STRENGTH
- ★ FINEST CONSTRUCTION, MATERIALS, FINISHES
- ★ BUILT FOR LONG SERVICE

*The Strongest, Handiest-Folding Table Made!*

**ANY SIZE STAGE IN ANY ROOM OR HALL, ANYTIME**

**1, 2, 3, 4 LEVEL BANDSTANDS**  
"U" shaped set-up for BANDS and ORCHESTRAS allow unobstructed vision of musicians, director and audience. Improve appearance, discipline and director control. Same units set-up in a straight line can be used as stepped-up audience seating risers.

**1-LEVEL PLATFORMS, STAGES**  
For speakers, raised speakers tables, ceremonies, acts, style shows. Quick set-up or removal. Used in Schools, Colleges, Churches, Hotels, Clubs, Lodges. Each unit only 2 1/2" thick when folded. Store in small space.

**USE THE SAME UNITS FOR MANY DIFFERENT ARRANGEMENTS**

**MITCHELL PORTABLE FOLDING STANDS**

- ★ Each unit a SAFE stand in itself
- ★ 4'x8'x3/4" Tops, 8" 16" 24" 32" heights
- ★ Strong, rigid TUBULAR STEEL LEGS

Write for Descriptive Folder  
**MITCHELL MFG. CO.**  
2726 S. 34th St. • Milwaukee 46, Wis.

**MFRS. of MITCHELL FOLD-O-LEG TABLES, BAND AND CHORAL STANDS, SEATING RISERS**

**SUPPORT**

**THE  
HEART FUND**

## CLASSROOM EQUIPMENT

### Desk and Seat

SE-443

*Built in One Piece*



The Arlington No. 552 Desk provides for both right and left-handed children. The seat swivels 45° in either direction, making it easily adjustable to both left and right-handed children and assuring proper elbow rest and body support.

The desk also recognizes all height differences in children since both the desk and seat are adjustable for height. It has an open-side design free of any interfering side frame making it easily adaptable to all classroom arrangements for group study and project work.

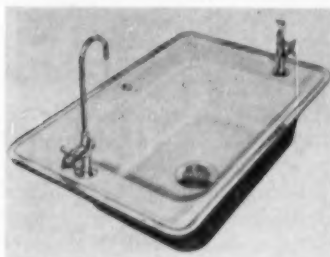
The lid of the desk closes to a 10° slope position or adjusts to level position. Quiet closure is assured by rubber lid bumpers and friction-disc slam control hinges.

ARLINGTON SEATING CO., Arlington Heights, Ill.

### Drinking Fountain

SE-444

*New Counter Type Model*



Bradley's counter type drinking fountain is designed for use in schools to provide a sanitary source of drinking water as well as other facilities.

The bowl is pressed steel available in acid-resisting vitreous enamel or stainless steel. Enameled bowls can be furnished in white, forest green, sun tan, sea green, sky blue and citron yellow.

The equipment includes bowl, stainless steel mounting rim, drinking bubbler, glass filler faucet and chromium plated sink strainer with tail piece.

BRADLEY WASHFOUNTAIN CO., North 22 and W. Michigan Sts., Milwaukee 1, Wis.

### Folding Table Legs

SE-445

*For Extra Table Space*

A screw driver, piece of plywood (3/4" x 24" x 64" or larger) and a set of Apex folding table legs are all that is needed to make a folding table.

This unit provides an answer to the need for extra surface space anywhere. The legs can be mounted in less than 30 minutes. Folds and unfolds in seconds.

MERRILL LEE CO., 3049 E. Grand Blvd., Detroit, Mich.

### Duracite CHALKBOARDS

LABORATORY TESTED

Outlast the building! Testing labs find Duracite good for 100+ years' classroom use! Easier writing, erasing. Resists abrasion, impact and humidity. Standard and special colors. Designed as fixed wall attachment or prefab, portable units.

**Also: Factory Built Units**

Prefabricated at factory to reduce cost of installation. Available in every desired size and arrangement of Chalkboard and Bulletin boards.

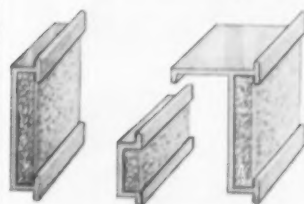
### EXTRUDED ALUMINUM TRIM

For all Chalkboard and Bulletin Board installations. Superior to wood. Economical, permanent finish. No upkeep.

### MAP RAIL

Extruded aluminum, with cork insert or without. Sliding hangers, fixtures. Can use with present wood trim.

Write for Samples.



### CORK Bulletins

Finely ground, high-grade cork all the way through. No lower grades underneath. Mounted on heavy burlap. Soft, resilient, easy to clean. Three beautiful new pastels to blend with your color scheme, and washable! Samples sent on request.



### Aluminum Framed Bulletin Boards & DISPLAY CASES

Extruded 63S alloy sections in etched and anodized dull satin. Widths and heights optional, thickness depending on wall. Fine brass hardware is aluminum-finished.



**Claridge**

6731 N. Olmsted  
Dept. 266 • Chicago 31

## CLASSROOM EQUIPMENT

### Teacher's Cabinet SE-412

#### *Includes Storage Space*

Wardrobe space for the teacher's personal effects and storage space for classroom necessities have been conveniently combined in the new Brunswick cabinet. Magnetic catches, which permit independent operation of the two full-size doors, provide for easy accessibility. The doors may be



SE-292

# Briten-All

## FLOOR CLEANER

*Gives Your Floors*

**KID GLOVE** *treatment*

BRITEN-ALL is a scientifically formulated liquid cleaner that actually cleans floors cleaner. It not only removes all surface dirt but cleans the pores—brightens and preserves the original colors and smart finish of every type of flooring material . . .

BRITEN-ALL is absolutely safe. Contains no acid or grit—cannot injure any type of flooring . . . gives your floors kid glove treatment.



locked when the cabinet is not in use.

The wardrobe portion of the cabinet has a hat shelf and hanger bar combination which adjusts in height for the individual teacher. A chrome-framed, plate glass mirror is an added convenience.

The 30" storage area has five adjustable shelves. This area may be altered further by adding more shelves or two standard-size file drawers.

THE BRUNSWICK-BALKE-COLLENDER Co., 623 W. Wabash Ave., Chicago 5, Ill.

### Metal Chair Clamps SE-413

#### *Hold Folding Chairs in Fixed Rows*

Sphinx Folding Chair Clamps tie folding chairs in groups during assemblies. Fire regulations in some areas demand that folding chairs be clamped together in fixed rows to prevent accidental collapsing of chairs or disarrangement of rows.

The clamps are well constructed of 16 gauge steel. They are easily and quickly attached or removed with a single bolt.

Can be furnished with tan enamel finish or cadmium plated finish.

SPHINX CHAIR GLIDE CO., P. O. Box 295, Fullerton, Calif.

### Machine Stands SE-414

#### *Hold All Types of Office Machines*



Tiffany Stands are completely adjustable to fit and hold all types of office machines. With quietness being an important factor in an educational institution, the "sonic safe" open top feature is an asset. Because of the equipment being used by a continuous flow of students, the heavy gauge steel construction will keep the maintenance cost to a minimum.

TIFFANY STAND CO., 7350 Forsyth, St. Louis 5, Mo.

# New SATIN CHROME FRAMES

...make the best school furniture even better!



## STACKING CHAIRS

Stacking simplifies storage, recovers space quickly by easy, secure nesting within floor area of a single unit. Legs 1 1/4" tapered tubular steel with ferrule-type chrome-plated rubber-cushioned glides, spread slightly for stability. Seat and back of hardwood have water-resistant finish.



## OPEN FRONT DESK

Top: 18" x 24" General Electric Textolite bonded to hardwood core. Metal box: 22" x 17" with large opening. Ample pencil tray. Tapered 1 1/4" tubular legs with ferrule-type, self-leveling noseless and mar-proof glides provide maximum stability. Choice of three colors or new Satin Chrome. Graduated heights.

## A COMPLETE LINE



**KUEHNE**  
(SAY "KEE-NEE")

Another Kuehne exclusive—beautiful Satin Chrome plating for frames and legs! It's non-reflecting and glare-proof... mar-resistant, non-scuffing and chip-proof... It requires no upkeep whatever. And its ultra-modern, bright, clean appearance is always in perfect harmony with any classroom plan and color.

Satin Chrome finish is sure to increase still more the phenomenal acceptance of Kuehne school furniture—acceptance won because of superior construction and top quality materials—scientifically correct design for all-day comfort and proper posture—and prices that promise more value for every dollar invested.

Compare before buying! Kuehne's 32 years of know-how in building fine furniture will be immediately apparent.

Send for illustrated brochure



MANUFACTURING CO. • MATTOON, ILLINOIS  
World's Largest Manufacturer of Tubular Furniture

DISTRIBUTORS: Inquire about the few choice territories still open.

## CLASSROOM EQUIPMENT

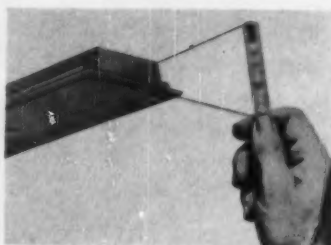
### Troffer

SE-415

#### Takes 1/2 Usual Depth

Thin-Lite Troffers, made by Lighting Products, Inc., require only 2 7/8" above the ceiling line. They are designed to save space for air-conditioning ducts and piping.

Three types of shielding and diffusing media are offered. The one-piece polystyrene louver panel has cells that are 5/8" x 5/8" x 9/16" and



the shielding is 42 degrees by 42 degrees. The second medium utilizes the Corning No. 70 low brightness flat glass lens. The third is a formed acrylic diffuser 1/8" thick which has

outstanding dimensional and color stability. The diffusers are framed and hinged, and are removable from the fixture without the use of tools, for easy servicing.

All three models of these luminaires are 48" in length and each is equipped with two 430 M.A. rapid-start four-foot lamps.

LIGHTING PRODUCTS, INC., Highland Park, Ill.

### Folding Table

SE-416

#### With Pedestal V-Leg



The Pedestal V-Leg Folding Table features maximum leg room and seating comfort. Even persons seated at the extreme end find no obstruction for their feet or knees, since the V-Leg is close to the center and the sturdy tubular steel base is flush with the floor.

For greater strength and lightness of weight, Barricks tables are made with steel center channel construction. The legs are of 1 1/4" welded tubular steel with smoothly finished tops of Duron, Weytex, Formica or Pionite plastic or plywood.

BARRICKS MFG. CO., 134 W. 54 St., Chicago 9, Ill.

## Your best buy in classroom seating

*Rowles*  
**modernaire**  
*Series*



No matter how you look at it, the MODERNAIRE gives you greater value . . . more classroom dependability . . . for your money.

The MODERNAIRE brings you unmatched strength and durability combined with prize-winning modern design and perfect comfort. With a big adjustable writing surface and the smooth curved seat and gracefully arched back, you're assured relaxing comfort all day long.

The MODERNAIRE brings you everything you look for in good classroom seating. It's the desk that belongs in your classrooms. It's your best buy . . . without a doubt.



Modenaire  
Chair



Modenaire  
Tablet Arm  
Chair

**ROWLES**  
School Equipment

Your local Rowles School Equipment Dealer will be pleased to give you complete details and prices on this Modenaire Desk. Call him today, or write direct to

**E. W. A. ROWLES COMPANY** ARLINGTON HEIGHTS, ILLINOIS

### Water Cooler

SE-417

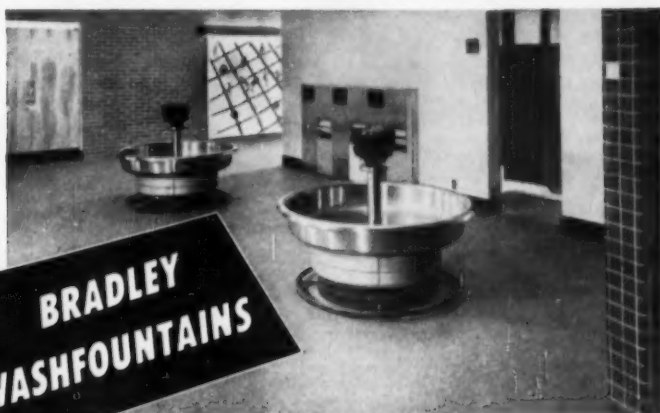
#### High Capacity—Small Size

A new pressure-type water cooler, the M3S, couples high capacity with small size and ease of installation. Only one foot sq. and three high, the unit cools as much as 2.9 gallons of 80° water to 50° per hour at room temperature of 90°.

The cooler can be economically and quickly installed almost anywhere. A drain connection is not required. The unit is simply connected to the cold water supply line and plugged into the nearest electrical outlet. A one and a half quart capacity receptacle is provided for waste.

CORDLEY & HAYES, 443 Fourth Ave., New York 16, N. Y.

# MORE SCHOOLS AGREE ON SANITARY WASH FIXTURES



**BRADLEY  
WASHFOUNTAINS**

Bradley Stainless Steel Washfountains and curved tile wall in Meadow Lane School, Meadow Lane, New York. Architects: Ketchum, Gina and Sharp.



Tamper-Proof features: metal pedestal, mixing valve enclosed, soap dispenser has locking-type filler cap, tamper-proof nuts lock tie rod assembly.

Adequate and sanitary wash fixtures are important whether in schools, factories, institutions, public or commercial buildings.

Across the nation, school authorities, experienced architects and plumbing contractors, regularly include Bradley Washfountains for new and remodeled buildings. Bradleys provide for economical group washing, supplying each washer with clean running spray of water, and with foot-control to eliminate all possible contagious contacts. Installation costs, water consumption, and washing time are reduced. Our Catalog 5601 will be mailed promptly on request.

## BRADLEY WASHFOUNTAIN CO.

2233 W. Michigan Street, Milwaukee 1, Wisconsin



John Greene School,  
Warwick, R.I.  
Architect:  
S. Wesley MacConnell

Rowland School, Cleveland  
Architect: Charles Bacon Rawley

Below:  
Pitcher School, Detroit  
Architect: George D. Mason



Circular 36" stainless steel Wash-fountain in use in John Greene School, Warwick, R. I.

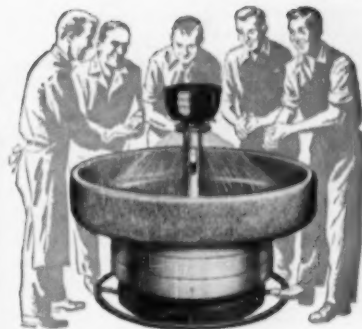


The Duo Washfountain — for smaller washrooms, — for teachers' use, — in or near cafeterias, etc. Foot-control means no waste of water, supply is cut off when foot is removed.

Write for Catalog 5601

**BRADLEY**  
washfountains

Distributed Through Plumbing Wholesalers



*Our experienced  
washroom  
consultants  
can help you.*

## BRADLEY REPRESENTATIVES

**ALABAMA**  
Birmingham: H. Ben Brown, Jr.  
**ARIZONA**  
Phoenix: Baker-Thomas Co.  
**CALIFORNIA**  
Los Angeles: Frank Pock Specialty Co.  
San Francisco: Trask & Squier Co., Inc.  
**COLORADO**  
Denver: Carl H. Roth Co.  
**FLORIDA**  
Jacksonville: Geo. P. Coyle & Sons  
St. Petersburg: Evan Hansard  
**GEORGIA**  
Atlanta: Jas. B. Barton, Jr., Co.  
**ILLINOIS**  
Chicago: Struck Equipment Co.  
Chicago: West & Leary  
**INDIANA**  
Evansville: Shouse-Brill Machinery Co.  
Fort Wayne: A. Frank Ausman  
Indianapolis: J. Edwin Aspinall  
**IOWA**  
Des Moines: Ostrander-McDonald Co.  
**KENTUCKY**  
Louisville: Shouse-Reed Co.  
**LOUISIANA**  
New Orleans: W. H. Grant, Jr.  
**MARYLAND**  
Baltimore: J. J. Taylor  
**MASSACHUSETTS**  
Boston: Mills Engineering Co., Inc.  
Worcester: Arthur S. Hall Co.  
**MICHIGAN**  
Detroit: D. T. Randall & Co.  
Grand Rapids: D. T. Randall & Co.  
**MINNESOTA**  
Minneapolis: S. H. Bartlett Co.  
**MISSOURI**  
Kansas City: Rivard Sales Co.  
St. Louis: Heinkel Sales Service  
**MONTANA**  
Salt Lake City: Rex W. Williams & Sons  
**NEBRASKA**  
Omaha: S. G. Peterson  
**NEW YORK**  
Albany: Alexander Mitchell  
New York: A. C. Cooper  
Rochester: Kolsiad Associates  
**NORTH CAROLINA**  
Charlotte: Lee A. Smith  
**OHIO**  
Cincinnati: Loftus-Schoenberger  
Cleveland: The Fielding-Wales Co.  
Columbus: A. G. Peterson Co.  
Toledo: D. T. Randall & Co.  
**OKLAHOMA**  
Oklahoma City: M. F. Fishell  
**OREGON**  
Portland: Ellis Cook Co.  
**PENNSYLVANIA**  
Philadelphia: Arthur Hicks, Jr.  
Pittsburgh: Paul V. Clarke  
**TENNESSEE**  
Knoxville: Chas. F. Sexton  
Memphis: Geo. R. Douglas  
Nashville: Southern Sales Co.  
**TEXAS**  
Dallas: Ray Engineering Co.  
El Paso: Herlin Engineering Co.  
Houston: Thomas E. Price  
**UTAH**  
Salt Lake City: Geo. A. Parry & Sons  
**VIRGINIA**  
Richmond: Frank Turner & Co.  
**WASHINGTON**  
Seattle: Bryan W. Burck Co.  
Spokane: Nelson Mechanical Equipment Co.  
**WEST VIRGINIA**  
Charleston: Fireproof Products Co.  
**WISCONSIN**  
Milwaukee: J. R. Pettley Co.  
**WASHINGTON, D. C.**  
Paul H. Werres  
**CANADA**  
Toronto 9, Ont.: Aristocrat Mfg. Co., Ltd.

## TEACHING MATERIALS

### Slide File Box

SE-418

**Holds 400 Cardboard, 176  
Glass Slides**

Eastman Kodak Co. has just developed a new file box for filing standard 2 x 2 slide mounts. It is made of durable plastic with leather-grain finish on back and front and styled like a book for convenient bookcase storage. Supplied with the file box are 16 plastic slide boxes, which make for easy filing of slides by groups or subject. When the cover of the file box is opened, the in-



dividual boxes tilt back in stepped position for easy removal.

Capacity is 400 cardboard or 176 glass slides.

EASTMAN KODAK CO., Editorial Service Bureau, Rochester 4, N. Y.

SE-296



Aldine Senior High School, Aldine, Texas—H. J. Elsik, Superintendent  
Architects: C. H. Kiefner and Eugene Werlin, Houston  
Engineer: Raymond L. Jenkins, Houston

## Another Repeat Specification for CLOW GASTEAM RADIATORS!

THIS NEW 47 CLASSROOM SCHOOL installed 116 Clow Gasteam radiators totaling 6107 sq. ft of radiation this year. This was because Clow Gasteam radiators have demonstrated superior performance in the important considerations of safety, comfort, economy and durability in seven other schools built by the Aldine Independent School District in the past two years.

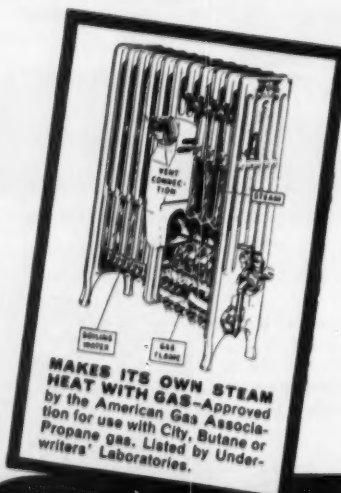
Also it's much easier to expand your school when it is heated with Gasteam radiators—all you have to do is add more radiators! No worry about the boiler being big enough.

Just contact us and we'll put you in touch with our nearest distributor. He'll be glad to refer you to satisfied school users in your area.

See our catalog in



or write for copy



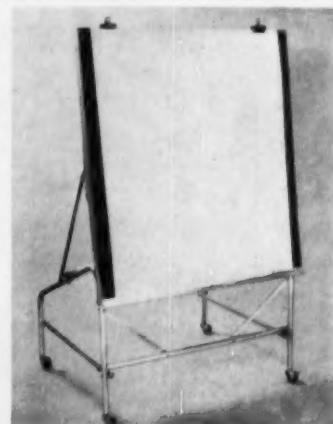
**JAMES B. CLOW & SONS**  
INC.

P. O. Box 6600-A • Chicago 80, Ill.

### Roll-Easel

SE-419

**For Primary Grade Instruction**



The Roll-Easel is a multi-purpose teaching aid, especially valuable for use in the primary grades in the making of experience charts. Guide lines for the Roll-Easel may be placed underneath the paper.

The easel may be adjusted to any angle, used as a writing surface, used as a movie screen, easily moved about the room, locked in place with wheel locks.

The top is made of tempered Masonite and the framework is of rigid aluminum. The paper feeds from a roll attached to the back of the unit.

EDUCATORS FURNITURE & SUPPLY Co., Inc., 5912 R Street, Sacramento 17, Calif.

SE-420

### Visual-Survey Short Tests

**Cut Time in Mass Testing**

The Keystone Visual-Survey Short Tests considerably cut down the time required for testing large numbers of students. These tests consist of eleven tests on three cards and can be administered by the nurse or teacher in about one minute. Furthermore, since it is not recommended that the students be referred when failing on any one of the tests in this Short Series, the testing may be terminated on the first failure and the student then put through the complete series of tests. Since at least 50% of the students will pass this short test, administered in an average of about one minute, it is easy to see that a great deal of time can be saved in testing many students.

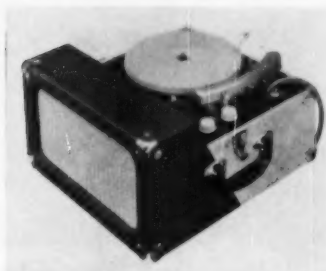
KEYSTONE VIEW Co., Meadville, Pa.

## TEACHING MATERIALS

### Phonograph

SE-436

*Features Variable Speed*



The Ballerina, Model C-12V portable phonograph, features variable speed for control of tempo and pitch of 33 1/3, 45, and 78 rpm records. The new model also has an extended range 11" oval speaker and a 5 watt inverse feedback amplifier employing a full power transformer with AC design. A new heat-resistant ceramic pick-up cartridge with double jewelled needle is encased in a sturdy cast metal arm.

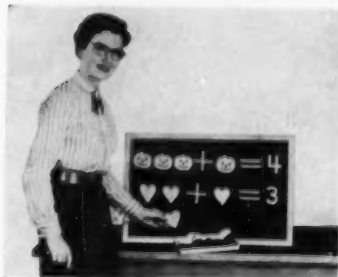
The new model weighs only 21 lbs. and can be easily carried.

NEWCOMB AUDIO PRODUCTS CO.,  
6824 Lexington Ave., Hollywood 38,  
Calif.

### Holiday Cut-Outs

SE-437

*Are Colorful Visual Aids*



Instructo Holiday Cut-Outs are available as an addition to the Instructo Flannel Boards and accessories. The new set consists of 144 die-cut felt pieces symbolic of important holidays. Nine holidays are included, with jack o'lanterns representing Hallowe'en, turkeys for Thanksgiving, hatchets for Washington's Birthday, etc. The teacher can vary the arithmetic lesson by correlating it with the current holiday.

JACRONDA MFG. CO., 5449 Hunter St., Philadelphia 31, Pa.

June, 1956

...have doubts about

the right

paint COLOR?



...you'll always be right with ARCO'S

## OPTONIC\* system!

Why endure that hassle again this painting season? ... the one in which all the "experts" express positive, pre-conceived opinions about color. Instead, select *correct* colors with the ARCO-developed OPTONIC\* System. Because OPTONIC colors work *with* light, not *against* it, they reduce eyestrain, fatigue and tension ... boost morale and efficiency to new high levels.

If you are overwhelmed by amateur opinions, get an OPTONIC color card. Then you'll *know* you're right! And you can be equally sure of highest quality when you specify ARCO paints, famous since 1881 for flapjacks to boiler-room protection of all types of buildings. Details of the complete line are found in Institutions Catalog Directory.

MASONRY COATINGS  
METAL PROTECTION  
ROOF COATINGS & CALK  
INSIDE FINISHES  
OUTSIDE PAINTS

\*... the one method that scientifically relates paint color to the source, type, and amount of light.

**ARCO PAINTS**  
Quality... SINCE 1881

THE ARCO COMPANY, 7301 Bessemer Ave., Cleveland 27, Ohio

Gentlemen: Please send information on:

☐ OPTONIC colors ☐ Masonry coatings ☐ Metal protection  
☐ Roof Coatings & Calk ☐ Inside Finishes ☐ Outside Paints.

NAME \_\_\_\_\_

COMPANY OR INSTITUTION \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_

TESTED FIRST TO LAST!

## MAINTENANCE

### Toilet Tank Float SE-421 *Guaranteed for Life of Tank*

Sexauer Guaranteed Floats are made of a special material that is completely unaffected by alkali, sulphur and other impurities which destroy copper floats.

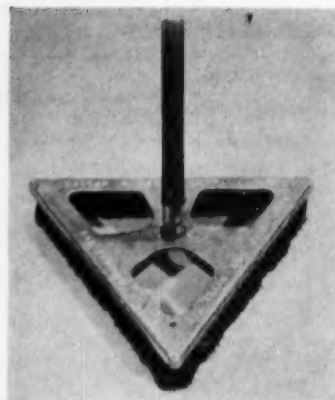
Because of its lighter weight and greater air capacity, the Sexauer float has greater buoyancy than larger ordinary floats. It fits even small size

tanks while insuring maximum lift and positive shut-off in any size tank.

J. A. SEXAUER MFG. Co., Dept. 4,  
2503-05 Third Ave., New York 51,  
N. Y.

### Damp Sweep Mop SE-422 *Gets Into Corners*

The New Model #3 Legge Damp Sweep Mop makes it easy to thoroughly clean corners because of its triangular shape. A special double



SE-298

*Hundreds of  
School Systems*  
**SAVE  
MAINTENANCE  
COSTS**



**GET YOUR FREE COPY  
OF THE 1956 EDITION**

Before you spend money or budget for maintenance on roofs, floors, windows, interior or exterior painting, or waterproofing, take a look at Tremco's Revised School Building Maintenance Program—free for the asking.

For 28 years, Tremco field representatives have worked with school personnel in the development of sound, economical building maintenance techniques for all surfaces, inside and out. What the Tremco Man can do for you is contained in a 20 page booklet which is saving large and small school systems thousands of dollars yearly. No obligation. Ask your Tremco Man or write The Tremco Manufacturing Co., 8701 Kinsman Road, Cleveland 4, Ohio.

**TREMCO**

PRODUCTS AND METHODS FOR BUILDING  
MAINTENANCE & CONSTRUCTION

The TREMCO MAN can help you solve  
problems involving

ROOFS PAINTING SASH   
FLOORS WATER REPELLENCE

swivel connects the 5' aluminum handle to the triangular brush at its center. This provides flick-of-the-wrist maneuverability. The user may change direction at any time without lifting the implement from the floor.

A sweeping cloth, with taped center hole, is provided with the mop. Launderable, the cloth may be used over and over.

WALTER G. LEGGE CO., INC., 101  
Park Ave., New York 17, N. Y.

### Dry Pickup Vacuum SE-423 *Is Highly Portable*



The D-110 is an inexpensive, lightweight vacuum cleaner for dry pickup. The vacuum is portable and powered by a universal type AC/DC, 115 volt, 1/2 hp motor.

Suction is created by a two-stage turbine which develops a 66" water lift at the end of a 1 1/2" hose, 8' long, with closed orifice. The tank is all-welded steel construction with 1/2 bushel capacity.

MULTI-CLEAN PRODUCTS, INC.,  
2277 Ford Parkway, St. Paul 1,  
Minn.

# SCHOOL EQUIPMENT INDEX—JUNE, 1956

This index covers products and services referred to in both advertisements and editorial reviews in this issue. To find a particular advertisement or editorial listing, consult the key (SE number) which precedes the listing, and which will also be found above the advertisement or listing in the body of the magazine.

If further information concerning any of these products is desired, it will be sent without charge or obligation. Simply circle the identifying numbers on the back of the business reply card below and mail it to us.

## ADVERTISED PRODUCTS

- 201 Formica Surfaces
- 202 GE Textolite
- 203 Sylvania Lighting Fixtures
- 204 American Desks
- 205 Ft. Howard Paper Towels
- 206 Chevrolet School Bus
- 207 Seat-Eat Convertible Cafeteria Seating
- 208 Eastman Kodascope Pageant Projectors
- 209 Penco Steel Lockers
- 210 Standard Program Controllers
- 211 Califone Califones
- 212 Recreation Playground Equipment
- 213 Pittsburgh Plate Glass Insulating Windows
- 214 Breuer Tornado Floor Machine
- 215 Du Pont Color Conditioning Paints
- 216 Powers Air Conditioning Control Systems
- 217 Jennison-Wright Kreolite Wood Block Floors
- 218 Lyon Steel Equipment
- 219 Johns-Manville Acoustical Materials
- 220 Dodge School Bus
- 221 Kayes Chi-Net Meal Tray
- 222 Monroe Automatic Calculator
- 223 Universal Gymnasium Calculator
- 224 Nesbitt Heating and Ventilating Equipment
- 225 Royal Typewriters
- 226 American Seating Folding Chair
- 227 American City Fund-Raising Campaign
- 228 Chicago Molded Cloverlane Melamine Dinnerware
- 229 Brown Nilbroe Towels
- 230 National Multi-Purpose Classroom Cabinets
- 231 Schieber Folding Tables and Benches
- 232 Griggs School Seating
- 233 Libbey-Owens-Ford Tuf-Flex Glass
- 234 Soxauer Faucet Washers
- 235 Dudley Master-Keyed Combination Padlock
- 236 Churchill Nu-Clear Floor Finish and Floor Sealer
- 237 Maduwall Live-Walls
- 238 Southern Coatings Rynoseal Wood Finish
- 239 Bell & Howell Audio-Visual Products
- 240 Church Plastic Wall Tile
- 241 Du Pont Tintline Window Shades
- 242 Sani-Mist Foot Spray Dispenser
- 243 Glover Homemaking Unit
- 244 Haldeman-Homme Erickson Portable Fold-A-Way Products
- 245 Baker-Boss Scaffolds
- 246 Wells Wood Flooring

## SE

- 247 Multi-Clean Blue Blazes Floor Cleaner
- 248 Matlos Matmark Floor Tile
- 249 Huntington Sani-Tate Bowl Cleaner
- 250 Chicago Hardware Sani-Dri Electric Dryers
- 251 Mississippi Diffused Glass
- 252 Diebold Storage Files
- 253 Brunswick-Balke-Collender School Furniture
- 254 Presto Disc and Tape Recording Equipment
- 255 E-Z-Fold Electrically Operated Basketball Backstops
- 256 Hillyard Hilco-Lustre Floor Polish
- 257 Bobrick Soap Dispensers
- 258 Photo Materials All-Metal Cutting Board
- 259 Victor Magnascope V200
- 260 Johnson Dual System Automatic Temperature Control
- 261 Arlington School Seating
- 262 Duro-Test Lamps
- 263 Sanymetal Junior Height Toilet Compartments
- 264 Beckley-Cordy SlateSteel Chalkboard
- 265 Beseler Vu-Lyte II Opaque Projector
- 266 Hussey Roll-Out Gym Seats
- 267 Brulin Floor Maintenance Projects
- 268 Peck & Harvey SpeedMaster White-Printers
- 269 Geopres Map Wringers
- 270 American Floor Vacuum Cleaners
- 271 Snyder Grandstands & Bleachers

## SE

- 272 Page Chain Link Fence
- 273 Playtime Bleachers
- 274 Sperti Faraday Far-a-matic Clocks
- 275 Safway Portable Steel Bleachers
- 276 American School And University 1956-57 Two Volume Edition
- 277 Underwood Carbon Paper, Ribbons
- 278 Madart Telescopic Gym Seats
- 279 Verd-A-Ray See-E-Zee Fluorescent Lamps
- 280 Plustica Dallas Ware Melamine Dinnerware
- 281 Bolta Fashion-Decorated Tempo-Trays
- 282 Ford School Bus & Truck
- 283 Duke Thurmaduke Cafeteria Counters and Food Warmers
- 284 Triumph Food Mixers
- 285 Prolen Plastica Compartment Tray
- 286 U. S. Plywood Weldwood Chalkboard
- 287 Finnell Floor Maintenance Equipment
- 288 Illuminating HairpinLine Cold Cathode Lighting Fixtures
- 289 Horn Folding Gym Seating
- 290 Mitchell Folding Tables and Stands
- 291 Claridge Chalkboards and Bulletin Boards
- 292 Vestal Briten-All Floor Cleaner
- 293 Kuehne Tubular School Furniture
- 294 Rowles Classroom Seating
- 295 Bradley Washfountains
- 296 Clow Gasteam Radiators
- 297 Arco Optonic Color System

FIRST CLASS  
PERMIT NO. 280  
SEC. 34.9 P. L. & R.  
NEW YORK, N.Y.

BUSINESS REPLY CARD  
No Postage Stamp Necessary If Mailed in the United States

POSTAGE WILL BE PAID BY

THE SCHOOL EXECUTIVE

470 FOURTH AVENUE

NEW YORK 16, N. Y.

## SE

- 298 Tremco Building Maintenance 1956 Booklet  
 299 Wayne Works Bus Body  
 300 Midwest Folding Products  
 301 Hang Spin Master School Shop Machine  
 302 Master Combination Padlocks  
 303 American Standard Floor Maps  
 304 Spencer Vacuot Floor Plates For Cleaning Maps  
 305 Bil-Jax Maintenance Trestle  
 306 Hampden Folding Chairs  
 307 National Combination Shackle Locks  
 308 Pratt & Lambert Lyt-All Flowing Paint  
 309 Senco Adjustable Typewriter Table  
 310 Gougler Keyless Locks  
 311 Stromberg-Carlson School Communication System  
 312 Haws Deck-Type Drinking Fountains  
 313 American Playground Equipment  
 314 Naden Electric Scoreboard  
 315 White Map Floor Cleaning Tools  
 316 Colonial Grade-Aid Sink, Counter and Storage Units  
 317 Garland Gar-Seal Floor Sealer  
 318 Corbin Letter Boxes  
 319 Economy Hi-Reach Telescopes  
 320 Hamilton Activity-Centered Science Tables  
 321 American Dispenser Combination Shelf and Soap Dispenser  
 322 Nutting School Trucks  
 323 Kent Floor Machines  
 324 Shure School Shop Furniture  
 325 Gregg Folding Tables, Benches  
 326 Universal Industries Food Mixer  
 327 Ravland-Borg Intercom System  
 328 USS Stainless Steel Bulk Milk Dispenser  
 329 Loxit Chalkboard System  
 330 Universal Galvanized Bleachers  
 331 Nissen Trompelines  
 332 Leavitt Bleachers

## SE

- 333 Rain Jet Sprinklers  
 334 Empire Varnish Waterlox Gym Finish  
 335 Halverson Magazine Rack  
 336 Wooster Stair Treads  
 337 World Dryer Hand Dryers

## NEW PRODUCT REVIEWS

## BUILDING PRODUCTS

- 401 Davidson Decorated Porcelain Panels  
 406 Bolta Vinyl Tile  
 407 Dole Water Control Valves  
 408 Foldcraft Partitions  
 409 Lynart Glass Sliding Doors  
 410 Consolidated General Skylights  
 411 Libbey-Owens-Ford Building Panel

## CLASSROOM EQUIPMENT

- 402 General Electric Fluorescent Lamp  
 412 Brunswick - Balke - Collender Teacher's Cabinet  
 413 Sphinx Metal Chair Clamps  
 414 Tiffany Machine Stands  
 415 Lighting Products Troffer  
 416 Barricks Folding Table  
 417 Cordley & Hayes Water Cooler  
 443 Arlington Desk & Seat  
 444 Bradley Drinking Fountain  
 445 Merrill Lee Folding Table Legs

## TEACHING MATERIALS

- 403 General Precision TV Camera  
 418 Eastman Kodak Slide File Box  
 419 Educators Roll-Easel  
 420 Keystone View Visual-Survey Short Tests

## SE

## FOOD SERVICE

- 404 Klopp Coin Counter  
 424 Market Forge Kettle-Cooker  
 425 General Tire & Rubber Dish Box  
 426 Midland Dinnerware  
 427 Sunrac Cafeteria Cooler  
 428 Nor-Lake Refrigerator  
 429 Chicago Molded Plastic Tumbler

## MAINTENANCE

- 421 Sexaver Toilet Tank Float  
 422 Walter G. Legge Damp Sweep Mop  
 423 Multi-Clean Dry Pickup Vacuum

## LIBRARY

- 430 John E. Sjostrom Library Furniture  
 431 Krylon Book Cover Spray  
 432 Standard Wood Book Display

## TRANSPORTATION

- 433 GMC School Bus  
 434 Aircraft Safety Belts  
 435 Onelda School Coach

## OTHER NEW PRODUCTS

- 405 Devere Riding Mower  
 440 Eastman Kodak Photocopy Unit  
 441 Roseman Landscape Rake  
 442 Arrow Drill Accessories

## AUDIO-VISUAL AIDS

- 501 International Science Film  
 502 National Audio-Visual Directory  
 503 YAF Biographies of American Leaders  
 504 Chartwell Basic Rhythms Album  
 505 Columbia Records for School

## MANUFACTURERS' CATALOGS

- 506 Bradley Group Washing Equipment  
 507 Monroe Plastic Floor Compound  
 508 Atlas School Shop Guide  
 509 Bristol Portable Humidity Recorders  
 510 Southern Coatings Wood Finish  
 511 Rittling Baseboard Radiation  
 512 Kimble Glass Blocks

## NEW TEXTBOOKS

- 513 Scott Foresman & Co. World History Text  
 514 Charles E. Merrill Spelling Series  
 515 Columbia University Volume on Vacations  
 516 Reinhold Organic Chemistry Text  
 517 Charles Scribner's Young Reader Books

THE SCHOOL EXECUTIVE, 470 Fourth Ave., New York 16, N. Y. June, 1956

Please ask the manufacturers, indicated by the numbers I have circled, to send further literature and information provided there is no charge or obligation.

201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224  
 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248  
 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272  
 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296  
 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320  
 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 401 402 403 404 405 406 407  
 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431  
 432 433 434 435 436 437 440 441 442 443 444 445 501 502 503 504 505 506 507 508 509 510 511 512  
 513 514 515 516 517

Also send literature on \_\_\_\_\_

NAME \_\_\_\_\_

TITLE \_\_\_\_\_

INSTITUTION \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

ZONE \_\_\_\_\_

STATE \_\_\_\_\_



## The '56 Superamic...

**ENGINEERED AND VISIONEERED FOR Safety!**

You school bus buyers and users asked for it . . . a school coach both *engineered* and *visioneered* for greatest passenger protection. Now, after many months of intensive development and thousands of miles of rough-road testing, Wayne proudly *fulfills* your request with the spectacular new Wayne Superamic Bus Body. Superamic wrap-around windshield (53% larger than ordinary school bus windshields) complements Wayne's much copied but never equalled visibility at the rear. New structural innovations further increase Wayne's unequalled impact resistance. Ask your Wayne Distributor for full information on the bus body YOU helped design.



### EXCLUSIVE NEW *Wayne* FEATURES

Huge Superamic wrap-around windshield with Low-Dip corners • Visi-ports for low-angle vision at front corners • Largest driver's window • Widest, strongest front • Overhead enclosed door controls • Ram-Jet air intakes on front for better ventilation • Dual defrosting • Pace-setting interior styling, etc.

WAYNE WORKS, INC. • RICHMOND, IND., U.S.A.

*The Look of The Future in School Transportation*



## FOOD SERVICE

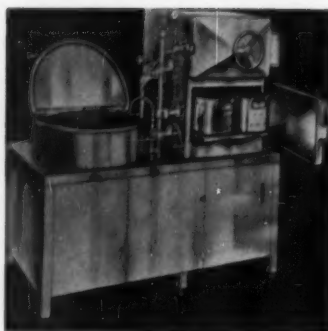
### Kettle-Cooker

SE-424

*Cooks, Serves Food in Same Containers*

The Model 2CK kettle and steam cooker combination will accommodate standard size cafeteria pans, enabling schools with their own accessories to both cook and serve food in the same container.

Two 4-bushel compartments with separate controls and a 40-gallon



steam jacketed kettle for soups,

saucers, casseroles, stews, spaghetti, etc. can prepare the entire meal in less than half the space and half the time required with ordinary equipment. Both kettle and cooker operate simultaneously from the same boiler.

MARKET FORGE CO., Everett, Mass.

### Dish Box

SE-425

*Fits Under Counter*



The new Bolta Dish Box holds soiled dishes and is especially designed to fit under counters and help eliminate clean-up clutter. Molded of Bolta-ron, a high-impact, low-pressure plastic material, the boxes are rugged yet light in weight.

Measuring 12" x 20" x 5", they have maximum capacity due to their deep-sided, one-piece construction. Odorless and easy to clean, they are impervious to fruit juices, food stains and grease.

THE GENERAL TIRE & RUBBER CO., BOLTA PRODUCTS DIV., Lawrence, Mass.

### Dinnerware

SE-426

*In Melmac Plastic*



A new process in making Meladur Melmac Plastic Dinnerware makes it possible to reproduce any desired insignia, in any color, in melamine, which is then fused to the dish.

The dinnerware is also guaranteed for one year against chipping, cracking or breaking. Designed specially for institutional use.

MIDLAND EQUIPMENT CO., 845 Chicago Ave., Evanston, Ill.

SE-300

## Midwest FOLDING TABLES

PORTABLE PLATFORMS    FOLDING STAGE  
FOLDING BAND STANDS    CADDIES

### FOR YOUR SCHOOL

#### MIDWEST FOLDING TABLES

Midwest offers you a complete line of folding tables for every school need. Easy folding! Compact storage! Beautiful tops! Featuring the famous Du-Money 20 safety lock—positive protection in both the folded and the extended position. All-welded construction! Reinforced recessed steel apron. Improved leg design for added sitting comfort! Your choice of styles and a wide range of sizes.

#### TABLE & CHAIR CADDIES

Save time and effort! Reduce noise and confusion! Solve your problem of moving and storage of your folding tables and chairs with a Midwest Caddy. Designed to handle all types of folding chairs and any size table. Built for rugged service. Smooth rolling rubber caster wheels for effortless handling.

#### PORTABLE FOLDING PLATFORMS

A heavy duty folding platform for auditorium, gym and multi-purpose room use. Size 4 ft. x 8 ft. Choice of 5 different heights. Du-Money 20 automatic leg locks. 3/4 in. plywood top. Folds compactly.

#### MIDWEST PORTABLE FOLDING STAGE

A new self-contained portable folding stage that's ideal for classroom use. Makes a strong spacious stage 8 ft. x 11 ft. 8 in. Entirely self-contained—no loose parts—no tools needed to set it up. Can be folded in a few seconds and moved from room to room. When folded is 8 ft. x 19" x 39". Equipped with easy rolling swivel casters with hard rubber tires. Patented safety locks. Extra heavy center supports.

#### CHORAL and BAND STANDS

Folding portable choral and band stands available in 18" or 36" widths; straight or tapered end styles; in range of 4 different heights. Folds easily, stores compactly.

Write today, for complete catalog!

Midwest

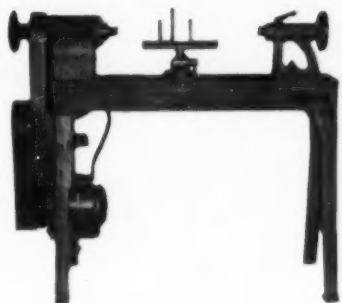
### FOLDING PRODUCTS

DEPT. 646    ROSELLE, ILLINOIS

SALES CORP.

The  
Haag

# SPIN MASTER



Although specifically designed for metal spinning, the SS-15 SPIN MASTER is ideal for wood turning, thereby making it the perfect choice for school shops operating on a limited budget. This 15-inch lathe offers simplified modern design, infinitely variable speed drive, stop-start safety bar and the versatile 1½"-8 thread nose spindle.

**HAAG MACHINE CO., INC.**

200 ROYAL AVE., HAWTHORNE, N. J.

SE-302

No. 1

**IN  
AMERICA'S  
SCHOOLS**

**Master**

**COMBINATION PADLOCKS**

**No. 1525** — Thousands of combinations, with 3-number dialing, protect the student — yet only one school-owned master key opens every locker.

**No. 1500**  
Same as No. 1525, but without key-control.

FREE — 4 page folder with complete information on both No. 1525 and No. 1500. Write today to Dept. 4



STAINLESS STEEL CASE

**KEY-CONTROLLED**  
School's master key opens every locker.

**Master Lock Company, Milwaukee 45, Wis.**  
*World's Largest Padlock Manufacturer*

**SCHOOLS**

**CUT  
CLEAN-UP  
TIME  
in 1/2  
with  
BIG X SWEEP  
MOPS**



BIG X is without equal...snatches up dust on contact! A high-speed sweep mop complete with our exclusive GIBRALTAR brace...Amazing durability...Available in widths up to 5 feet!

**VICTORY Wet Mops**  
Cost least to use because of their high efficiency and double-length life...16-ply cable-twist live, long-fibre yarn...Very, very durable. Very, very popular!



**HOLZ-EM Applicators**

So well known they need no praise. Used by more professional floor finishers than any other applicator. You, too, will say they're in a class by themselves.

**Order** AMERICAN STANDARD products from your regular supplier. He has them or can get them for you. If not, write us direct.

**"TOPS IN MOPS"**  
**AMERICAN STANDARD MFG. COMPANY**  
Incorporated 1908

CHARLES E. KREBS and WALTER C. KREBS  
2507 SOUTH GREEN STREET • CHICAGO 8, ILLINOIS



## FOOD SERVICE

### Cafeteria Cooler

SE-427

#### *In Wide Range of Capacities*

The Sunroc Cafeteria comes in capacities from 6 gph to 42 gph, from the smallest to the largest school cafeteria requirements. The unit is a convenient 36" counter-height, 28 1/16" wide and 21 3/16" deep.

Available for either wall or island location, the Sunroc Cafeteria has no bulky, protruding parts. The



cabinet is supplied in either stainless steel or grey hammertone enamel finish. The stainless steel top and drain grill is equipped with glass fillers, bubblers or a combination of each to meet individual requirements.

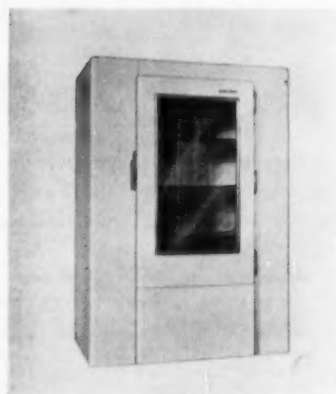
Stainless steel top and side shelves are supplied on special order and the cabinet accommodates up to two side shelves on either or both sides.

SUNROC CORP., Glen Riddle, Pa.

### Refrigerator

SE-428

#### *Features Glass Door*



A special glass-front door, permitting easy interior viewing and a choice of two evaporator coils for ice cube or no-ice operation are features of the new 1956 reach-in refrigerator line made by Nor-Lake, Inc.

Glass in the door is triple Thermopane that prevents the forming of condensation and is large enough for unhindered vision, while the choice of coils is offered at no change in price.

Available in 18, 22, and 28 cu. ft. models.

NOR-LAKE, INC., Dept. KP, Hudson, Wis.

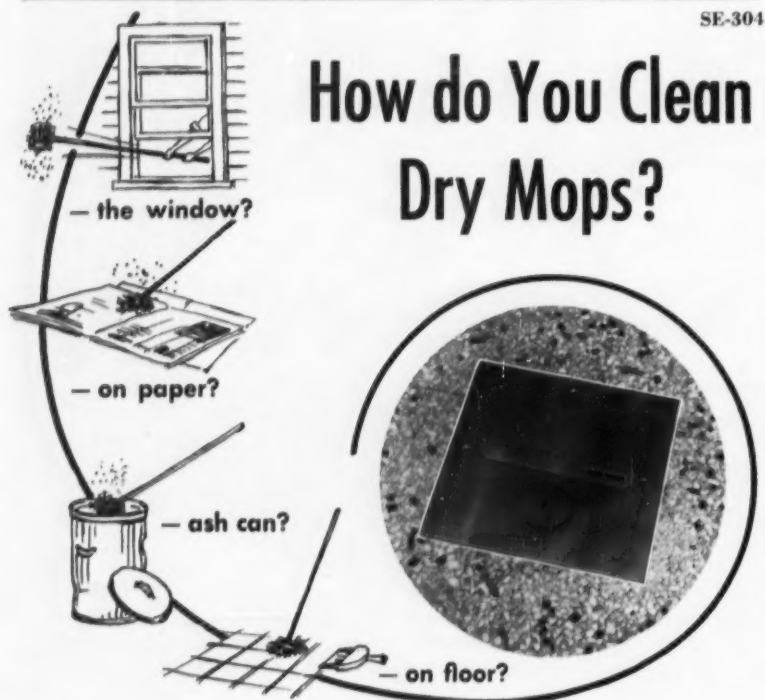
### Plastic Tumbler

SE-429

#### *Is Shatterproof*

The Starlane Tumbler is of break-resistant plastic, lightweight, and easy to handle and stack. The fluting on the outside of the tumbler is not only decorative, but it also minimizes scoring. Three sizes are available: the 5 oz. fruit juice tumbler, the 9 1/2 oz. water tumbler, and the 12 oz. ice tea tumbler.

CHICAGO MOLDED PRODUCTS CORP., Dinnerware Div., 1020 N. Kolmar Ave., Chicago 51, Ill.



There are many ways that are wrong. The one right way is to install Vacuslot plates in all corridors. The operator passes the dry mop over the slot. The strands are pulled in, shaken violently by the inrush of air and all dust goes down to the basement. No time lost — no dust scattered — Vacuslot is the modern sanitary method.

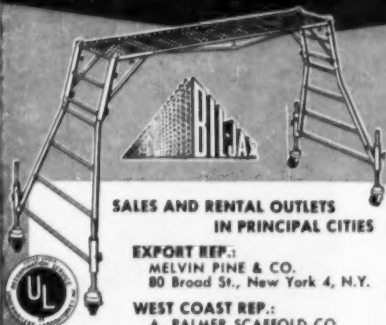
You can use the same system for cleaning floors, pick up spilled liquids, cleaning boiler tubes, machinery, furniture, and the air conditioning equipment. Vacuslots can be installed in any building, old or new. Ask for Bulletin 153.

THE SPENCER TURBINE COMPANY • HARTFORD 6, CONNECTICUT

**SPENCER**  
HARTFORD

501-D

## USE THE BIL-JAX MAINTENANCE TRESTLE for those "off-the-ground" jobs!



**SALES AND RENTAL OUTLETS  
IN PRINCIPAL CITIES**


**EXPORT REP.:**  
MELVIN PINE & CO.  
80 Broad St., New York 4, N.Y.

**WEST COAST REP.:**  
A. PALMER SCAFFOLD CO.  
3928 San Fernando Road  
Glendale 4, California

- Combines convenience with safety . . . all steel.
- Work platform is no-slip expanded metal.
- Ball-bearing casters (locking type) make moving easy.
- Patented. U. I. approved.

Send for facts on complete Bil-Jax line.

**BIL-JAX, INC. • ARCHBOLD • OHIO**  
SCAFFOLDING • TRESTLES • HOIST TOWERS • STAGES




## CAREFUL BUYERS choose

*Hampden*



No. 73

**TODAY'S BEST  
BUY IN STURDY,  
FOLDING CHAIRS!**

Why? First, cost . . . second, strength . . . third, design. Hampden's first on all three counts! Write for a sample chair, inspect it, test it, no obligation. This is Hampden's No. 73. Steel frame, contoured plywood seat, baked-on enamel is chip resistant. Rubber feet.



*Hampden*

SPECIALTY PRODUCTS, INC.  
1811 HAMPTON • MASSACHUSETTS

Write Dept. 5D  
for catalog describing  
5 new public seating  
chairs.

In leading  
Educational  
Institutions...



## NATIONAL LOCK combination self-locking



No. 68-264

## Shackle Locks

Provide  
Dependable  
Locker  
Security

National Lock Shackle Locks score high with school officials . . . students . . . custodians. Many plus features assure the ultimate in locker security. Soundly engineered, ruggedly made. All working parts are wrought metal with corrosion resistant electro-plating . . . extra strong, chromium plated shackle . . . double case, outer case stainless Steel. Self-locking (complete redialing is required when shackle is closed). Three number dialing . . . thousands of combinations. Available with or without masterkey feature. Without masterkey specify No. 68-265.

### LOCKER RECORDS At Your Finger-Tips

Master charts for lock records, complete with leatherette binder, are supplied FREE with quantity lock purchases.

write on your letterhead  
for a free sample lock



**NATIONAL LOCK COMPANY**  
Rockford, Illinois • Lock Division

## LIBRARY

### Library Furniture SE-430

#### Three New Units Available



John E. Sjostrom has added a Multi-Level Circulation Desk (illustrated), a "ranch-type" Reference Unit and a new Freeline table with

Micolor top to their line of library furniture.

The Multi-Level Circulation Desk combines the Librarian's Desk with a 66" long to two 40" high Shelving Units, giving the librarian storage shelves within arm's reach. The outside of the Shelving Unit features a storage cabinet with sliding doors.

The Reference Unit is counter-height and combines a 30-drawer card catalog with two Reference Shelving Units. This new arrangement allows the user to either stand or sit, when using the card catalog.

The Freeline Library Table is now available with Micolor Formica tops

in four basic colors—Sprout Green, Aqua, Flame and Pumpkin.

JOHN E. SJOSTROM CO., INC., 1717 N. Tenth St., Philadelphia 22, Pa.

### Book Cover Spray SE-431

#### Coating Protects Binding



Krylon Crystal-Clear spray acrylic plastic leaves a clear, transparent, tough coating on any book binding. The Krylon spray comes in a giant 17.8 oz. aerosol can or in a 6 oz. can.

A periodic coating with Crystal-Clear on bindings makes dusting much easier and preserves the original color and lettering perfectly.

KRYLON, INC., Norristown, Pa.

### Book Display SE-432

#### In New Double-Faced Unit



Combining beauty with usefulness and durability, the new Model 143 Double Face Book Display is ideal for school libraries. To assure freedom from imperfections as well as uniformity of color, grain and figure, only finest northern hard maple, air and kiln dried to 5-7% moisture at the time of machining and assembly, is used.

The Standard Finish is available in two beautiful shades of blonde.

STANDARD WOOD PRODUCTS CORP., LIBRARY DIV., 47 W. 63 St., New York 23, N. Y.

**GIVE TO CARE**

## ADD beauty to walls SAVE Budget Dollars!



**PRATT & LAMBERT NEW LYT-ALL FLOWING FLAT** produces a beautiful, satin-smooth finish in exclusive, "Calibrated Colors" that can help make the most attractive interiors in town. And it will save your budget from a beating. Here's how:

It saves *labor* because it goes on so easily. It saves *gallons* because it spreads so far. It cuts *painting time* because it dries quickly. It saves *annoyance* because there's no objectionable odor. But the biggest saving of all in *New Lyt-all Flowing Flat* is its *scrubbability*. This means less repainting because you can wash it again and again . . . and beautiful new-looking walls through many seasons.

Your Pratt & Lambert representative is trained to help you combine *economical painting* with *expert color planning*. His services are yours without obligation.

Write: Pratt & Lambert-Inc., 75 Tonawanda St., Buffalo 7, N. Y. In Canada: 254 Courtwright St., Fort Erie, Ont.



## PRATT & LAMBERT-INC.

*A Dependable Name in Paint since 1849*

NEW YORK • BUFFALO • CHICAGO • FORT ERIE, ONTARIO



WRITE FOR  
DETAILS TO  
DEPT. S-E

## AT LAST!

A truly  
**ADJUSTABLE**  
Typewriter  
Table  
with **ALL**  
the Features  
you've been  
looking for!...

- **STURDY** DOES NOT VIBRATE
- **SILENT** MOUNTED IN RUBBER
- **ADJUSTABLE** SELF-LOCKING UNIT
- **MODERN DESIGN**
- **ECONOMICAL** ALL STEEL CONSTRUCTION



Drop-Leaf  
Table



Back-breaker!



Arm-stretcher!



A-H-H-H-H  
SEMCO!!



Bookkeeping  
Table

**SEMCO SALES**

PINELLAS INT. AIRPORT  
ST. PETERSBURG, FLORIDA

It's the **CLICK**  
that counts



Available with  
or without  
Master Key

For quickest  
and easiest  
operation, plus  
economy,  
security and  
durability  
— it's the  
Gougler  
Keyless Lock.  
In the dark or  
in the light, just  
Count the Clicks  
— presto, it's open.

### GOUGLER KEYLESS LOCKS

- Are Serially Numbered
- Have FREE Service Records
- Materials & Workmanship Guaranteed

WRITE FOR  
INFORMATION

**C. L. GOUGLER Keyless Lock Co.**  
705-769 Lake St., Dept. 3, Kent, Ohio



"Good morning everybody. Today all classes will..."

## Your school **can** afford a communications system like this!

Your school can have all the benefits of 20th century communications, without waiting. Custom-engineered to fit your needs, a Stromberg-Carlson School Communications System offers you choice of 2-way loudspeaking communication, all-call, AM-FM radio, 3-speed record player, intercom room telephones, our exclusive Red Telephone Emergency System, plus other optional features, in any combination.

### Long-term payments

Many administrators and school board members are particularly interested in our deferred payment plan. It gives you the *ideal* system for your school *now*—and spaces payments over a convenient time.

Why not take a few minutes for a preliminary discussion with one of our factory-trained representatives. This entails no obligation, of course. Look for his name in *Sweet's File* or write us for it.

5,245,059 readers (probably including members of your school board) are learning the importance of school communications through this full-page advertisement, published in:

New Yorker, May 5 U. S. News, May 4  
Time, May 14 Business Week, May 19  
Fortune, May Nation's Business, May  
Newsweek, May 28

If you'd like a set of reprints for your next board meeting, write us immediately, and we'll see that you get them right away.



Special Products Division  
**STROMBERG-CARLSON COMPANY**  
A DIVISION OF GENERAL DYNAMICS CORPORATION  
1706 University Avenue Rochester 3, New York

## TRANSPORTATION

### School Bus

SE-433

#### Sets New Safety Standards

GMC Truck and Coach Div. has developed a 72-passenger school bus designed for simple operation, maneuverability, and greater driver visibility.

Key to the wide angle of vision from the driver's seat is the forward-control design. Sitting over the en-



gine in advance of the vehicle's front wheels, the driver has no hood to block his view of the roadway directly in front of the vehicle.

Ease of operation results from the

use of a famous GMC Hydra-Matic transmission in conjunction with a 160-hp gasoline engine. With gear shifting eliminated, the driver can devote his full attention to steering and loading and unloading children.

GMC TRUCK & COACH DIV., 660 South Blvd., E., Pontiac 11, Mich.

### Safety Belts

SE-434

#### For School Bus Use

The Aircraft School Bus Safety Belt has been designed especially for school children riding in school buses. The belt is made of nylon webbing and chromium buckle, each testing over 4500 lbs. strength, and bolted to the floor with adequate cold rolled steel metal parts. Each Safety Belt serves one seat, whether it holds one, two, or three passengers.

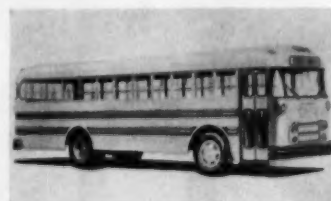
The "possible injury area" in buses is much larger than in automobiles and Safety Belts will hold the children firmly in place in the event of any type of accident.

AIRCRAFT BUCKLES CO., Sikeston, Mo.

### School Coach

SE-435

In Models for 61, 67 or 73 Students



The Oneida Monoliner is a transit school coach produced in models for 61, 67 or 73 students, mountable on Marmon-Herrington safe-way and the Jay Madsen safety-liner Pusher-type chassis.

Highlights include: Oneida-ramic vision with full wrap-around windshield and rear glass; inward folding doors; no overhead or outside mechanism; contoured stop and warning lights; extra-heavy gauge front and rear body panels; exclusive roof-to-bottom-of-heavy-side-skirt side pillars; two 6½" double-fluted rub rails.

ONEIDA PRODUCTS DIV., HENNEY MOTOR CO., INC., Canastota, N. Y.

## IN STEP with advanced school design...

### HAWS Deck-Type Drinking Fountains

meet the demands of your school building program for improved water facilities inside the classroom! Your choice of optional combinations of HAWS Faucets and Fixtures make these fountains adaptable to all modern classroom needs. Teachers and students alike, benefit from HAWS!



Series 2400  
Model 2444



Series 2000  
Model 2050



Series 2300  
Model 2350



Series 2200  
Model 2255

#### FEATURES

Shielded, angle-stream, anti-squirt fountain head.

Vandal-proof socket flanges and lugs.

Automatic stream control valve.

For the latest school design...

Specify the latest... HAWS DECK-TYPE DRINKING FOUNTAINS!

Write today... for the New HAWS Catalog!

In addition to the complete line of fountains, HAWS also features electric water coolers and emergency eye-wash fountains... and, **KRAMER FLUSH VALVES**, for all plumbing fixtures that require an automatic closing valve.

**HAWS DRINKING FAUCET CO.**

1443 FOURTH STREET (Since 1909) BERKELEY 10, CALIFORNIA

BUY U.S. BONDS

THE SCHOOL EXECUTIVE

FOR SUPERIOR DESIGN, CONSTRUCTION  
AND PERFORMANCE... FAR GREATER  
STRENGTH... UNEQUALLED SAFETY...



**AMERICAN  
Approved  
PLAYGROUND  
SWIMMING POOL  
and DRESSING ROOM  
EQUIPMENT**

Since 1911 the finest equipment built,  
backed by lifetime guarantee against  
defective materials and construction  
... specified by leading recreational  
authorities for almost half a century.

**Send for New Catalog**

Write for Folder  
On AMERICAN'S  
JIM PATTERSON  
**LIFETIME  
ALUMINUM  
DIVING  
BOARD**  
WORLD'S FINEST  
OFFICIAL BOARD

**AMERICAN**  
PLAYGROUND DEVICE CO.  
ANDERSON, INDIANA, U. S. A.  
WORLD'S LARGEST MANUFACTURERS OF PINE  
PARK, PICNIC, PLAYGROUND, SWIMMING  
POOL AND DRESSING ROOM EQUIPMENT

It is Easy to have  
**Clean Floors**  
when you use . . . . .

**WHITE**  
**Floor Cleaning Tools**

White floor cleaning equipment is engineered to clean your floors properly and quickly — and to give years of efficient service. Top quality materials plus expert workmanship make White the best you can buy. And there are 252 cleaning items all under one brand name.

The famous Tysaver single outfit shown below combines the oval bucket with the White "Can't Splash" wringer. At right is the double outfit with the White Eccentric Gear Downward Pressure Wringer. Either type wringer can be used with the single or the double outfit.

SEND FOR CATALOG  
NUMBER 156



**WHITE MOP WRINGER CO.**

7 MOHAWK ST. • FULTONVILLE, N.Y.  
Canadian Factory: Paris, Ontario, Canada

The ONE complete line of floor cleaning tools

SEE THE SCORE **BETTER**  
WITH A **Naden**  
**ELECTRIC  
SCOREBOARD**

Here's the latest Naden football scoreboard N-400-IV, with 24" Instant-Vue numerals, easily readable, day or night, from any seat in the stadium.

Write for catalog  
No. 22 — Football,  
No. 23 — Basketball,  
No. 25 — Baseball.  
All Naden score-  
boards are fully  
guaranteed.

**HOME** 36 **TIME** 10:59 **SPLIT-SECOND  
TIMING** **VISITOR** 28 **TO-GO**  
**DOWN** **QUARTER**

**FOOTBALL**

**NADEN AND SONS** WEBSTER CITY, IOWA

## OTHER NEW PRODUCTS

### Photocopy Unit SE-440

#### Is Low Cost and Efficient

The Verifax Signet Copier is a simplified low-cost photocopy machine that produces several copies of any document in one minute. Its simplicity of operation further encourages the trend toward decentralized photocopying since anyone who needs copies of correspondence, tran-



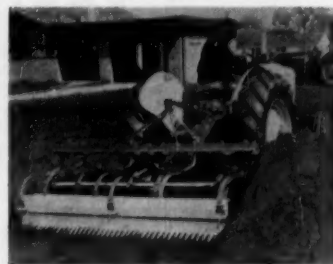
scripts, health and attendance records, teacher and board meeting re-

ports or other documents can make them after only five minutes instruction.

The Signet Copier handles documents up to and including the 8½" x 14" legal size. It can be operated in ordinary room illumination.

EASTMAN KODAK CO., Rochester 4, N. Y.

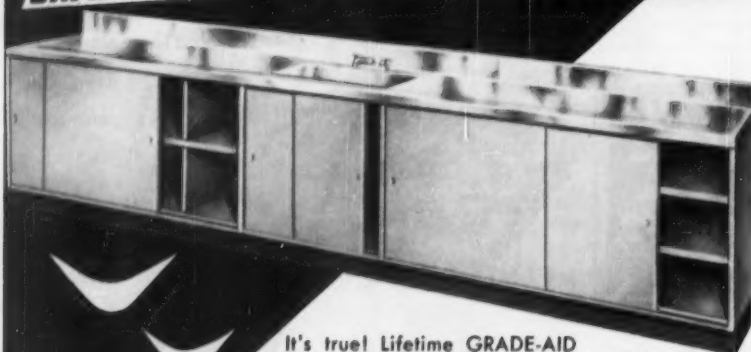
### Landscape Rake SE-441 New Combination Unit Available



The Roseman Tiller-Rake does the campus grounds work of many men and several pieces of equipment making it unnecessary to load, haul and use plows, meekers, harrows, blades, drags, pulverizers, and rakes. The unit scarifies, grades, pulverizes, spreads, and finish rakes by positioning the front scarifying tines, the middle blade or the rear pulverizer rake bar by means of a hand pitch control wheel.

ROSEMAN TRACTOR EQUIPMENT Co., 2618 Ridge Rd., Evanston, Ill.

## YOUR LOW FIRST COST is the LAST COST! with these STEEL and STAINLESS STEEL **GRADE-AID** PROJECT COUNTERS!



It's true! Lifetime **GRADE-AID** sink, counter and storage units actually cost you less—completely installed—than cabinet work!

#### AND LOOK at these "EXTRA" ADVANTAGES!

**ONE-PIECE STAINLESS STEEL** Sink and Counter tops—free from mouldings or trim—easy to keep clean—durable and permanent! (Also available without sink.)

**WIDE RANGE** of storage units with or without sliding doors—all with shelves large enough for 12 x 18 art paper and other bulky supplies!

**CHOICE OF HEIGHT** to fit all age and grade requirements!

**UNEXCELLED SAFETY.** Every edge and corner is carefully rounded. No sharp corners (or splinters) to endanger even the smallest child!

**ALL-STEEL CONSTRUCTION** eliminates 'carving' and other defacement. Units may be relocated easily and cheaply.

**SIMPLE ECONOMICAL INSTALLATION**—your Grade-Aid unit is shipped completely assembled, ready to slide into place!

HERE'S the PERMANENT SOLUTION to CLASSROOM PROJECT EQUIPMENT at a price within your budget. Write today for full details.

**GRADE-AID**

**DIVISION**

**COLONIAL ENGINEERING CO., INC.**

SOMERVILLE 44, MASSACHUSETTS

### Drill Accessories SE-442 Grind, Buff, Wire Brush and Polish

The Arco Drill-Shop converts any ¼" electric drill into a handy bench tool for power polishing, grinding and wire brushing. Included are wheel arbor to fit any ¼" drill; 4" buffing wheel for polishing silverware, jewelry, etc.; 3" wire brush for removing rust and paint from metals; 3" grinding wheel for sharpening knives and tools; and polishing compound for high-gloss finishes when using buffing wheel.

A sturdy one-piece cast drill stand clamps or screws firmly in place on any flat surface while the strong clamp holds the drill vibration-free.

ARROW METAL PRODUCTS CO., 140 W. Broadway, New York 13, N. Y.

## Seal out Dirt and Stains

### ON WOOD OR CONCRETE FLOORS

GAR-SEAL, made with Bakelite resins, penetrates wood pores and gives a long-wearing, low-lustre surface coating that keeps dirt, grease and ink from staining floors. GAR-SEAL binds the wood fibers, prevents splintering and provides a surface that is easy to clean with brush or mop.

Excellent, too, for concrete floors. Fills and seals them with a waterproof binder that stops grease and stains from penetrating. You'll reduce dusting and get a smoother, longer-wearing surface.

Ask your Garland Man, too, about GAR-TONE and GAR-LUSTRE, the deodorized wall paints that are completely washable. Dirt, ink and grease can be scrubbed off walls repeatedly—with no damage to the finish.



Send Us Your Special Floor Problem  
Your Garland Man is a trained specialist in solving paint, roof and floor maintenance problems. He's a good man to consult.  
Write Dept. SE-6 for Folder A-406

**THE GARLAND COMPANY**  
Cleveland 5, Ohio

SE-318



### Specify Letter Boxes Built to Post Office Standards

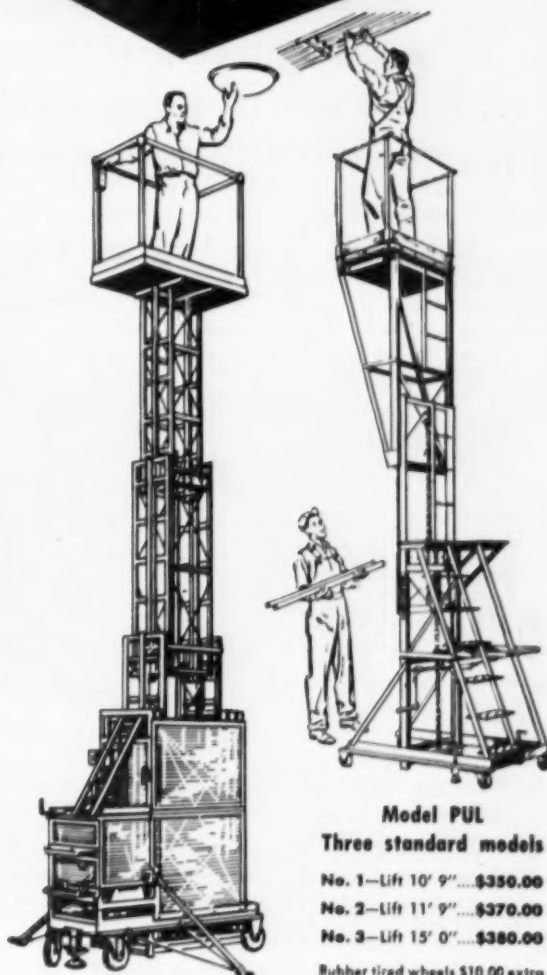
You get the same sturdy construction and variety of sizes that qualify CORBIN Letter Boxes for post office use when you specify them for schools and colleges. What's more, you get optional "extras" like the convenience-keying feature that permits a student to unlock dormitory door, room door, and letter box with a single key. And of course you get the rich, distinctive CORBIN designs that blend perfectly with the interior of any school building.

CORBIN Letter Boxes are available with either key or combination type locks; in complete, assembled sections, ready for service. Write for Catalog WP 25. Corbin Wood Products Division, Dept. St. The American Hardware Corporation, Hornell, N. Y.



June, 1956

90% of overhead  
servicing jobs can be done  
faster and with perfect safety  
with these **ECONOMY**  
**Hi-Reach Telescopes!**



#### Model PUL

##### Three standard models

No. 1—Lift 10' 9"....\$350.00

No. 2—Lift 11' 9"....\$370.00

No. 3—Lift 15' 0"....\$380.00

Rubber tired wheels \$10.00 extra  
F.O.B. Chicago

#### Model LB

##### Hi-Reach Telescopes

Four heights 20 ft. to 35 ft.  
Standard Models from \$1435.00 up.

Custom built Hi-Reach  
Telescopes up to 100 ft.

Write for  
complete catalogue

Headquarters for standard and special built overhead  
service lifters and material handling equipment since 1901

**ECONOMY ENGINEERING COMPANY**

4534 West Lake St., Chicago 24, Illinois

## AUDIO-VISUAL AIDS

### SE-501 Science Film

*Putting Animals In Groups*, 13 minutes, 16mm sound, color, introduces children to the idea that they can classify animals by observing their structures. Distinctive characteristics of mammals, birds, reptiles, amphibians, fishes and insects are presented in this order. The film ends with a review and summary that ties together the essential ideas. The scientific vocabulary is kept to a minimum; the only technical words are those in quite common use in books and other printed ma-

terial used in the elementary schools. Common animals are used to illustrate the simple classifications. Frequent questions are included in the narration to help in the teaching. **INTERNATIONAL FILM BUREAU, Inc.**, 57 E. Jackson Blvd., Chicago 4, Ill.

### SE-502 Audio-Visual Directory

The 24-page *NAVA Membership List and Trade Directory* lists NAVA dealers by geographical location so that audio-visual users can use the facilities and services of any dealer—whether in a local or an unfamiliar area—for conferences, sales meetings, or any other situation involving the use of audio-visual materials. Each

dealer listing is clearly coded to show where a user can find each of 15 types of audio-visual equipment for rental; which dealers offer projection service, projection room facilities, and equipment repairs; which dealers offer sponsored, educational, informational, entertainment and religious films, and the size of each dealer's film library; and where A-V equipment, accessories, films, and filmstrips can be purchased. **NATIONAL AUDIO-VISUAL ASSOCIATION**, 2540 Eastwood Ave., Evanston, Ill.

### SE-503 Biographies of American Leaders

Under the series title *American Leaders Series*, Young America Films has released a new set of educational filmstrips dealing with the life and work of six persons who have contributed in an important way to the growth of America. Produced in original full-color drawings, each filmstrip traces the life of an individual from early childhood through late life, pointing out the personalities and events that influenced his life, and explaining the contributions made to America. The six great Americans treated in this new set of visualized biographies are Jane Adams, Susan B. Anthony, Benjamin Franklin, Thomas Jefferson, Horace Mann, and Roger Williams. **YOUNG AMERICA FILMS, INC.**, 18 E. 41st St., New York 17, N. Y.

### SE-504 Basic Rhythms Album

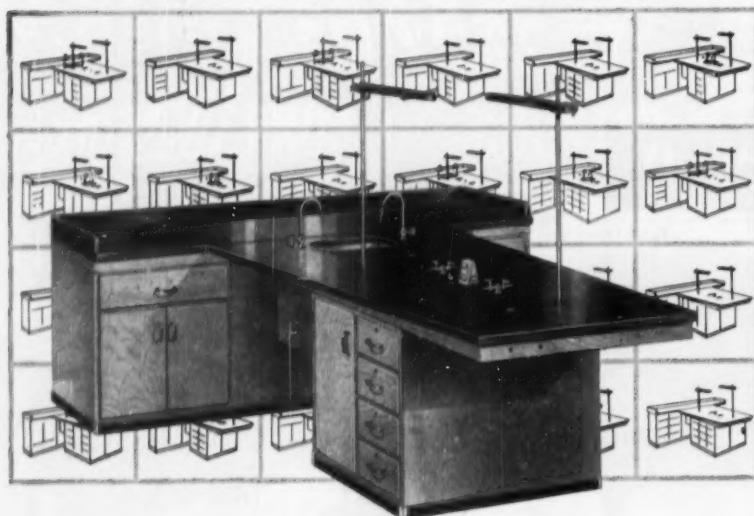
*The Basic Rhythms Album* includes 4 ten-inch unbreakable records, 8 sides, 78 rpm, arranged and recorded by Ruth Evans for use with *The Basic Rhythms Book* by Dorothy S. Ainsworth and Ruth Evans. The album, \$8.00, and the book, \$4.50, are both issued by Chartwell House. The program is designed to use in teaching the skills of fundamental and coordinated movement to high-school and college girls, and to women in adult education classes. The album provides music specially arranged for use with each lesson in motor training or basic body movement and balance in the book. The lessons in the book, which are for instructors, give students training for improved balance and carriage, and free, relaxed, efficient movement in the activities of daily life. The authors have adapted elements of gymnastics and dance for their purpose, and the activities and music offered in the book and the album were developed over a period of years in their basic rhythms classes of young women. **CHARTWELL HOUSE, INC.**, 112 E. 19th St., New York 3, N. Y.

### SE-505 Records for School

*Records For School, Volume I, Secondary Education*. This catalog presents a selection of Columbia Records to be used with various sections of the school curriculum. Its contents include History; Music in History; Music Appreciation; Social Studies; Language Arts; and Science and Sports. An Index and Price List is included at the back of the catalog. **COLUMBIA RECORDS**, Education Dept., 799 Seventh Ave., New York 19, N. Y.

SE-320

**Hamilton Activity-Centered science tables**  
...with 90 work-and-storage combinations...  
solve tomorrow's classroom problems, today!



Before your freshmen are seniors, classroom requirements will be critical. You can start to meet this problem now with Hamilton Activity-Centered tables, which permit science rooms to be used every period of every day, for laboratory, academic or home room activities.

These new Hamilton units offer so many advantages—

largest available work surface... up to 40 locked drawers... unique, tapered "traffic-flow" design... low-cost roughing-in option... Northern Hard Maple construction in 6 distinctive finishes... 90 different work-and-storage combinations! There's a lot more we'd like you to know about Hamilton Activity-Centered science tables—please write today.



# Hamilton

LABORATORY EQUIPMENT

HAMILTON MANUFACTURING COMPANY TWO RIVERS, WISCONSIN

## CUT SCHOOL COSTS 3 WAYS!



### NEW! STAINLESS STEEL *Lathursshelf*

#### Combination SHELF and SOAP DISPENSER

Lathursshelf is indeed in step with the times! First, because it combines in one self-contained unit a smart, practical washroom shelf and heavy-duty soap dispenser that reduces today's construction costs by eliminating 2 separate installations. Second, because its huge 1/2 gal. capacity curtails frequent re-fills—thereby cutting today's high maintenance costs. Third, because its Stainless Steel construction means long life—thereby reducing today's high replacement costs. (Available with 1 or 2 valves.)

WESTERN SALES OFFICE:

PHILIP SHORE & Associates, 2881 E. Pico Blvd., Los Angeles 23, Calif.

**AMERICAN DISPENSER COMPANY, Inc.**

manufacturers of quality soap dispensing equipment  
115 EAST 23rd ST., NEW YORK 10, N.Y. • OREGON 3-0999

SE-322

free bulletin shows

# 39 TIME SAVING TRUCKS

Especially Designed for  
Schools, Colleges, Institutions

You'll find exactly what you need in our complete line of school trucks in this 10-page brochure—trucks designed to provide easier handling of the wide variety of items used in schools, colleges and similar institutions. Each Nutting Truck is clearly illustrated and completely described!

Figure 2880—Mobile  
Collection Unit for  
Cafeterias—just one of  
many standard Nutting  
Trucks for specialized  
applications.



dishes  
trays  
wrestling mats  
planes  
tables  
folding chairs  
books  
laboratory  
equipment  
linen  
baggage  
cleaning supplies  
kitchens and  
bakeries

WRITE TODAY  
for  
Bulletin 53-5C

Since  
1891

**NUTTING TRUCK AND CASTER COMPANY**

2607 Division Street West

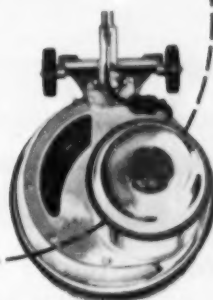
Faribault, Minnesota

CLOCK 'EM  
AND SEE!



## OFF-SET MOTOR WINS!

NOTHING  
OUTCLEANS  
A  
**KENT**



More work done in less man-hours — at less cost — that's the kind of efficiency modern cleaning demands. That's why so many hospital, industrial and commercial users depend on the big Kent line to cut maintenance costs. Only Kent offers the cleaning development that makes floor maintenance completely easy — Kent's exclusive OFF-SET MOTOR design. Imperfect balance and sidewise pull of the brush make ordinary machines difficult to operate. Kent's exclusive, all-weight on brush OFF-SET MOTOR design counterbalances handle-weight . . . minimizes torque. Result: less fatigue, faster work, longer wear, fewer service problems. Get the facts . . . get the machine that cuts labor costs up to 18.9% over competitive makes!



**QUIET JUNIOR VACUUM CLEANER**  
... Ideal for all institutions.

Quiet operation and handling ease convinced St. Luke's Hospital . . . let us show you.



K's 4 Off-set motor design floor machine — one of 24 such machines in use at 600-bed St. Luke's Hospital, N.Y.C. St. Luke's uses 54 Kent cleaning units, including Kent vacuum cleaners, for all types of wet and dry cleaning maintenance operations.

MAIL COUPON TODAY!

**KENT COMPANY INC.**

420 Canal Street, Rome, New York

Yes, I want to cut maintenance costs! Send full details  
on your line of ☐ floor machines ☐ vacuums.

Name \_\_\_\_\_

Firm Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

## MANUFACTURERS' CATALOGS

### SE-506 Group Washing Equipment

*Catalog 5601.* A new twenty-eight-page four-color catalog has just been issued by the Bradley Washfountain Co., which presents the complete line of Bradley washfountains, group showers, drinking fountains and playground showers. The booklet also contains information regarding Bradley's new floating type foot mechanism and new counter type fixtures as well as data on comparative costs and advantages of group washing versus ordinary wash fixtures. BRADLEY WASHFOUNTAIN CO., 2203 West Michigan St., Milwaukee 1, Wis.

### SE-507 Plastic Floor Compound

A new application bulletin, *Form No. 1087*, descriptive of Steel-Hard granular plastic flooring compound, is announced by The Monroe Co. Reputed to easily withstand 20-ton loads, steel-hard is especially recommended for loading docks and aisles subjected to heavy industrial traffic. It is particularly suitable for extra-heavy, steel-wheel trucking areas. Steel-hard can be used to patch or resurface any concrete floor, indoors or out. THE MONROE CO., INC., 10703 Quebec Ave., Cleveland 6, O.

### SE-508 School Shop Guide

*Atlas School Shop Planning Guide* is the title of a twenty-four-page catalog which

was prepared for shop teachers who want to rectify inadequate conditions in schools already built or for schools that are planning new additions or new buildings. The contents include the following: ten basic principles of school shop planning; factors to consider in shop planning; remodeling and modernizing the school shop; typical shops for typical situations; making a shop layout and building a model; and selecting shop equipment. This school shop planning guide is available at \$.50 per copy. ATLAS PRESS CO., Kalamazoo, Mich.

### SE-509 Portable Humidity Recorders

*Bulletin H1008.* A new bulletin describing and illustrating the company's line of portable recorders for relative humidity and temperature has just been released by The Bristol Co. The six-page two-color bulletin shows samples of typical records made by the Thermo-Humidigraph recorders which are designed to record conditions in the room or chamber in which they are placed. Permanent mounting models are also shown. THE BRISTOL CO., Waterbury 20, Conn.

### SE-510 Wood Finish

*Rynoseal Deep Penetrating Wood Finish*, a single page catalog, tells of Rynoseal, a new synthetic resin liquid that primes, seals and finishes woods. It penetrates deep into the wood and bonds to the pores. Inseparable from the wood itself, it builds up to a tough, impenetrable surface with a velvet-soft luster. Aside from floors and other interior wood surfaces it is recommended for institutional furniture—desks, tables, etc., and for woodwork. It is safe and effective on all woods, including maple. It requires no special surface preparation and is easy to apply. SOUTHERN COATINGS & CHEMICAL CO., Sumter, S. C.

### SE-511 Baseboard Radiation

*Catalog BB-56.* A new 12-page catalog covering Rittling Custom and Pre-Fab Baseboard Radiation has just been completed. It is illustrated and gives complete capacities, ratings, specifications, dimensions and engineering data, on both lines. THE RITTLING CORP., Rittling Bldg., Buffalo 5, N. Y.

### SE-512 Glass Blocks

*Owens-Illinois Glass Block.* A new catalog describing Owens-Illinois Glass Block and its functions is now available by The Kimble Glass Co. The catalog lists the various glass block patterns manufactured including the newest designs in light and solar heat controlling blocks, with details on the functional advantages of each specific pattern. Included in the catalog are instructions and construction details for both large and small-size panel installations in steel, wood frame, brick or brick veneer constructions. As an aid to building designers, the catalog has a convenient table of dimensions; a section on how to calculate illumination and brightness; and tables on solar heat control and fuel savings. KIMBLE GLASS CO., Toledo 1, Ohio.

## SCHOOL SHOP FURNITURE

Write for catalog of  
COMPLETE SHURE-BUILT LINE

... or send specifications  
for prompt quotation

SE-324



"SCOTTY" INDUSTRIAL  
WORK BENCH (K. D.)

9195—29" x 48"—60"—72"

9196—34" x 48"—60"—72"

Steel, Nat-Flex, or Hardwood top.

### HERE ARE A FEW SHURE-BUILT STOCK ITEMS



"SCOTTY"  
PORTABLE CABINET  
MODEL 9549



"SCOTTY"  
SHOP DESK (K. D.)  
MODEL 9333



"SCOTTY"  
CART  
MODEL 9540

### WELL-MADE, RIGHT-PRICED, ATTRACTIVE



MODEL 9190  
SERVICE WORK BENCH (K. D.)  
with Nat-Flex® top.  
Also available with steel top;  
with or without drawers.



MODEL 9192  
WORK BENCH (K. D.)  
with Nat-Flex® top.  
Also available with  
steel top—Model 9191

# Shure

MANUFACTURING CORPORATION  
1601 S. HANLEY RD. • ST. LOUIS 17, MO.

77. M.

# FOLD-AWAY

## FOLDING TABLES AND BENCHES



- STURDY
- EASY TO STORE
- EASY TO CLEAN

A choice of tops — Plastic, Masonite, Fir and Birch Plywood, and Linoleum.

Folding tables, like most other manufactured articles, have gone through a process of evolution. For years we have manufactured folding tables, and have noted the changes made and the reasons for such changes. Here we present what we consider the best line of folding tables on the market, giving due consideration to sturdiness of design, finish, materials used, and all factors involved. For use in an institution, folding tables made by Grogg Bros. of Spring Grove, Pa., will meet all reasonable expectations and give long years of satisfactory service.

### CONSTRUCTION DETAILS

Top 3/16" Tempered Masonite.  
Apron 18 Gauge Cold Rolled Steel.  
Leg 16 Gauge 1" O.D. Cold Rolled Steel Tubing, Acetylene Welded.

Frame 3/8" 5-Ply Fir Plywood 4" Wide.

Molding Extruded Aluminum "T".  
Positive Locking Device (Extra Heavy Aluminum Casting).  
Clips—18 Gauge 1" Wide, held by four No. 8 x 3/8 Wood Screws.  
Floor Glides—Extra Heavy Steel, Chrome Plated.

# GROGG BROS.

MFG. CO.  
SPRING GROVE, PA.

Contact your nearest  
dealer or write for  
brochure & price list

SE-326

# univex

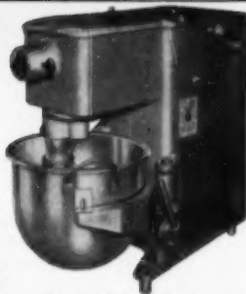
## FOOD MIXER

# \$375<sup>00</sup>

### Model 1222

(Complete Beater, Whip & Bowl)

- 22 qt. capacity
- Automatically Timed
- Change speeds without stopping
- Compare load capacity. Mix 24 lb. pizza or bread dough — whip potatoes, cream etc.



Price Slightly Higher in West

### UNIVEX MIXER STANDS AND ATTACHMENTS

Mixer Stand	Cabinet Mixer Stand		
			Meat & Food Chopper \$46.00
			Vegetable Slicer \$85.00
			Knife & Tool Sharpener \$65.00
\$35.00-A240 (open type)	\$50.00-E240 (cabinet type)		

### UNIVERSAL INDUSTRIES

369 MYSTIC AVE., SOMERVILLE 45, MASS.

# ALL-NEW FOR MODERN SCHOOL ADMINISTRATION



## Rauland MODEL S224 LOW COST Intercommunication System

### 2-Way Communication and Program Facilities

- \* For up to 48 rooms
- \* "All Call" feature
- \* Volume level indicator
- \* Remote mike operation
- \* Matching radio and phonograph available

This compact, precision-built system is ideal for low-cost 2-way communication facilities to provide efficient supervision of all school activities. Announcement, speeches and voice messages can be made by microphone to any or all rooms (up to a total of 48); speech origination from any room to the central cabinet is available. Includes "All-Call" feature for simple instantaneous operation. Incorporates 30-watt amplifier with input connections for remote microphone, radio, phonograph and tape recorder. Housed in a compact, attractive all-steel blue-gray cabinet suitable for desk or table. When combined with the S404 matching radio-phonograph (see below), a complete centralized school sound system with unusual flexibility and utility is achieved at remarkably low cost, within the budget means of even the smallest school.

### MATCHING S404 RADIO & PHONOGRAPH

Combines perfectly with the S224 system. Provides complete facilities for the distribution and control of radio and phonograph programs. Includes precision-built FM-AM radio tuner and high quality 3-speed record player which plays all records up to 12" at 33 1/3, 45 and 78 rpm speeds. The matching S404 and S224 units may be stacked compactly to conserve desk space. Together, they form a complete and versatile sound system offering both communication and program facilities at the most moderate cost.



WRITE FOR COMPLETE DETAILED DESCRIPTION

### RAULAND-BORG CORPORATION

Rauland-Borg Corporation

3515-E West Addison St., Chicago 18, Ill.

Send full details on RAULAND School Sound Systems. We have ..... classrooms.

Name ..... Title .....

School .....

Address .....

City ..... Zone ..... State .....

## NEW TEXTBOOKS

### SE-513 World History Text

*Man's Story, World History in its Geographic Setting*, by T. Walter Wallbank. 768 pages. This text includes a 16-page, full-color map section; spot maps, time lines, photographs, cartoons, study aids, annotated reading lists, and audio-visual aids listings, and ten geographic settings. To increase their usefulness in the classroom, the end-of-chapter study aids and review materials have been revised in the 1956 edition of *Man's Story*. New review questions have been added for each chap-

ter, as well as a time guide of important dates along with topics for additional research. Up-to-the-minute events as recent as the Eisenhower administration are included. For high-school world-history courses. Price \$4.48. SCOTT, FORESMAN AND Co., 433 E. Erie St., Chicago 11, Ill.

### SE-514 Spelling

*Spelling For Word Mastery* is a new spelling series for grades two through eight by David H. Patton and Eleanor M. Johnson. *Spelling For Word Mastery* combines into a single program the three necessary approaches to every-pupil spelling success: (1) a true language arts approach; (2) a practical program of functional writing; and (3) a systematic approach which en-

sures mastery of a basic word list. The texts include full color illustrations in every grade, a program of word meanings, dictionary training, and word analysis. The series consists of seven textbooks. A set of teacher's manuals is also available. CHARLES E. MERRILL BOOKS, Education Center, Columbus 18, Ohio.

### SE-515 Vacations

*Vacations Abroad, Volume VIII* offers a wide selection of educational activities of interest to persons intending to go abroad for their vacations. These include vacation courses, study tours, hostels, holiday camps and centers, work camps. As far as possible, exact information is given concerning dates, places, subjects of study and cost. In order to save space, most of the entries are printed in only one of three languages—English, French or Spanish—according to the national or official language of the country in which the activities take place. The index at the volume is arranged according to the organizations sponsoring vacation activities, listed under the countries in which those organizations are located. Issued by Unesco. Price is \$1.00. COLUMBIA UNIVERSITY PRESS, 2960 Broadway, New York 27, N. Y.

### SE-516 Organic Chemistry

*Organic Chemistry, New Third Edition* by Louis F. Fieser and Mary Fieser. This new book is a complete revision, developing in orderly sequence the principles and concepts of modern organic chemistry and the applications of the fundamental science to technology and to biochemistry and medicine. The third edition abounds in new facts and interpretations and covers the literature to September, 1955. Price is \$8.95. REINHOLD PUBLISHING CORP., 430 Park Ave., New York 22, N. Y.

### SE-517 Young Reader Books

A four-page brochure lists the new Spring, 1956 Books for Young Readers. They are as follows: (1) *Maxie* by Virginia Kahl. 32 pages. Ages 4-8. \$2.50. Maxie, an entertaining and ambitious dachshund had difficulty with his short legs, but finally proved himself big, fierce and fast; (2) *The Fourth of July Story* by Alice Dalgliesh. 32 pages. Ages 6-9. \$2.50. This book introduces children to Independence Day and gives as simply as possible, the story of the birthday of our country; (3) *Jeanne-Marie In Gay Paris* by Francoise. 32 pages. Ages 4-7. \$2.75. Jeanne-Marie, that much-loved little French girl, now leaves her farm to visit her aunt in gay Paris. There she has a wonderful time, but she never forgets her friends in the south of France; (4) *Adventures of Esteban* by Marguerite Butterfield. 128 pages. Ages 6-10. \$2.50. It is a childlike story of Esteban who, with his friend Fernando, his goat and dog, lives on the island of Majorca; (5) *Here Come The Lions!* by Alice E. Goudey. 96 pages. Ages 5-9. \$2.25. First we see the African lion family and watch the cubs grow up in Mrs. Goudey's little zoo. Then comes the puma, or mountain lion, family—with pages presenting briefly other big cats. CHARLES SCRIBNER'S SONS, 597 Fifth Ave., New York, 17, N. Y.

## "Our milk is always cold and sanitary with the bulk milk dispenser"

SAYS MRS. RUTH SCHROCK, DIETICIAN  
LAFAYETTE JUNIOR HIGH SCHOOL, UNIONTOWN, PA.



The LaFayette school serves about 125 meals daily; and in the process, the students drink nine to ten gallons of fresh, cold milk.

The milk is cold because the Stainless Steel dispenser is cold; it has a refrigeration system all its own. Naturally, this also promotes the highest standards of sanitation. Individual containers can't get warm on the serving line. Older milk can't be forgotten and allowed to sour.

But when you install a bulk milk dispenser, the most dramatic thing you'll notice is the better flavor. The milk is ice-cold and fresh-tasting. The difference is so remarkable that milk consumption almost always goes up when a bulk milk dispenser goes into service.

Why not send the coupon and learn more about this way to serve more flavorful milk? (You'll save money, too, because you buy the milk at bulk can rates.)

UNITED STATES STEEL CORPORATION, PITTSBURGH  
AMERICAN STEEL & WIRE DIVISION, CLEVELAND  
COLUMBIA-GENEVA STEEL DIVISION, SAN FRANCISCO  
NATIONAL TUBE DIVISION, PITTSBURGH  
TENNESSEE COAL & IRON DIVISION, FAIRFIELD, ALA.  
UNITED STATES STEEL SUPPLY DIVISION,  
WAREHOUSE DISTRIBUTORS  
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

## USS STAINLESS STEEL

SHEETS • STRIP • PLATES • BARS • BILLETS  
PIPE • TUBES • WIRE • SPECIAL SECTIONS

Agricultural Extension  
United States Steel Corporation  
Room 5362, 525 William Penn Place  
Pittsburgh 30, Pa.

Please send more information about Stainless Steel bulk milk dispensers.

Name ..... Title .....

Company .....

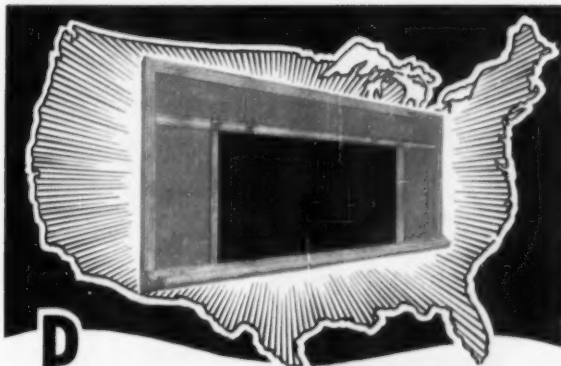
Street .....

City ..... Zone .... State .....



UNITED STATES STEEL

SE-329



## PROVEN ADVANTAGES OF THE LOXIT CHALKBOARD SYSTEM

*From Coast to Coast*, architects and school authorities are increasingly aware that the Loxit Complete Chalkboard system provides the right answers to all chalkboard problems ... simplifying construction, meeting unusual conditions, assuring permanent beauty and reducing maintenance costs. The Loxit Complete Chalkboard system includes Kompo-Cite, Petralox Cement-Asbestos and Porcelox Porcelain Enamel Chalkboards in the following colors: Rite Green, Darkrite Green, Tan, Gray, Blue and Coral, as well as Loxikork and Loxitex Tackboards, and Tru-Snap All-Aluminum Trim, and a full line of accessory items.



Write for Literature, Catalogs and Samples

**LOXIT SYSTEMS, INC.** 1217 W. WASHINGTON BLVD.  
CHICAGO 7, ILLINOIS

SE-336

**ECONOMICAL  
SAFE SEATING**

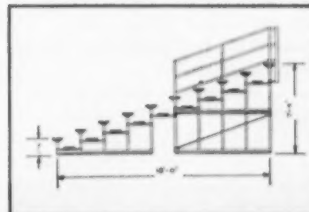
*for any size  
audience*



**AMERICAN-UNIVERSAL  
GALVANIZED  
BLEACHERS**

*"Package  
Units"  
at low cost*

Engineered to national standards; provide exact number of seat-rows for present needs—economically expanded in depth and section for future plans. Prefabricated structural steel members *Galvanized for thorough protection against rust and corrosion—at no extra cost.*

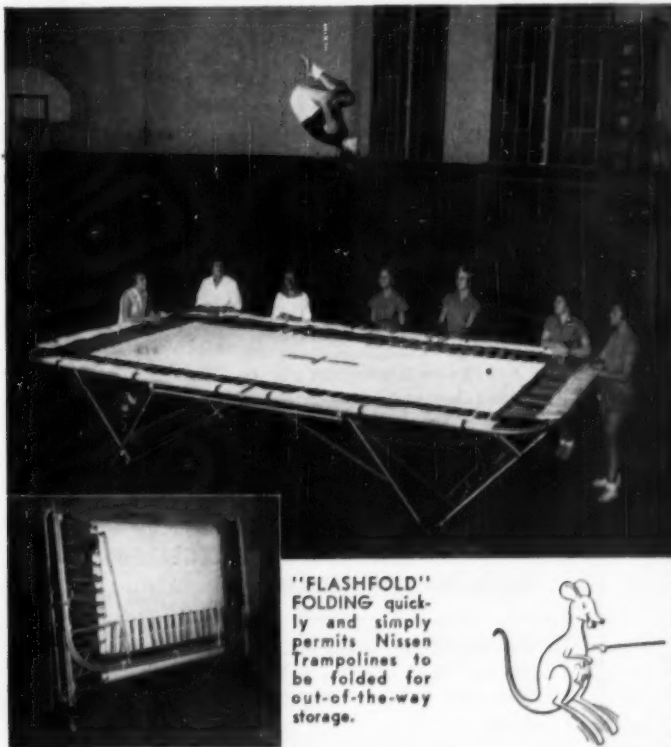


These bleachers are designed for permanent, semi-permanent, or temporary seating at all types of indoor or outdoor events.

**UNIVERSAL  
MANUFACTURING CORP.**

Write for New Bulletin  
ZELIENOPLE 7, PA.

SE-331



**"FLASHFOLD"**  
FOLDING quickly and simply permits Nissen Trampolines to be folded for out-of-the-way storage.



*If it isn't a **NISSEN**, it isn't a **TRAMPOLINE***

**CHOICE OF  
OVER 3,000 SCHOOLS  
AND UNIVERSITIES**

## NISSEN TRAMPOLINES\*

**MODEL "77-A"**

- **EXCLUSIVE HIDDEN HINGE** for easy folding with both side and end pads in place.
- **SOLID NYLON BED** gives plenty of bounce.
- **WIDE OPEN SPACE UNDER BED** for full clearance.

\*Reg. U. S. Pat. Office

**NISSEN TRAMPOLINE COMPANY**  
200 A. Avenue, N. W., Cedar Rapids, Iowa

Please send me free information on "How to Use the Nissen Trampoline Model '77-A' in our Training and Physical Education Program"—a personalized Nissen service.

NAME \_\_\_\_\_  
REPRESENTING \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

# CROWD PLEASER!

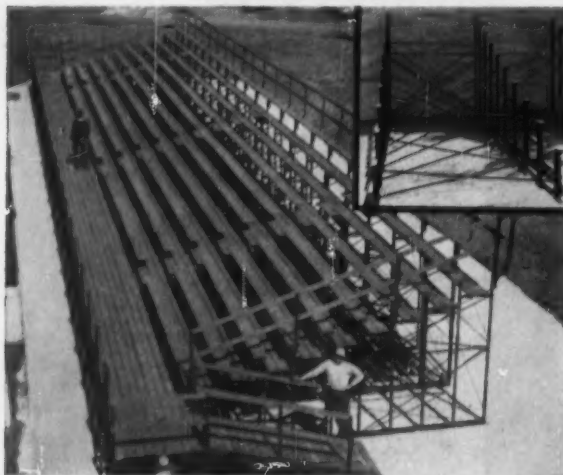
SE-332

COMFORTABLE...SAFE

**LEAVITT  
BLEACHERS**

Follow the crowd to Leavitt Bleachers! They're safety-engineered for impossibly heavy loads... with wide seat and foot boards for both safety and comfort. *Extra comfort* results from Leavitt features such as back-sloping seat boards... an off-set back rail which provides back rest for top row seats.

Leavitt Bleachers are priced to fit a school budget... they're completely portable... easily stored in a minimum space. In both portable steel bleachers (elevated or non-elevated) or knock-down wood bleachers.



Leavitt Bleachers are expertly built of quality materials for strength, safety and long life. Portable, elevated type steel grandstand (above) has heavy cross-bracing in both directions for rigidity... sway prevention.

**DISTRIBUTORS IN 48 STATES...USE COUPON BELOW!**

Leavitt Products Co.  
206 Griggs St., Urbana, Ill.

Send me the following, FREE—at no obligation.

☐ Leavitt Bleacher literature. ☐ Name of nearest Leavitt dealer.

☐ Estimate of (wood—steel) stands seating \_\_\_\_\_, to be \_\_\_\_\_ ft. long, \_\_\_\_\_ ft. high.

Name \_\_\_\_\_

School \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

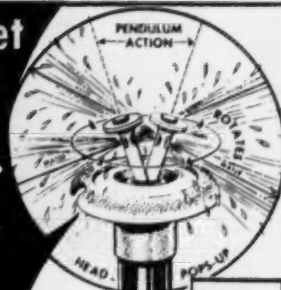
*Leavitt*

Bleachers have seated millions wherever crowds assemble, since 1895.

Your budget  
can include

**RAIN JET  
SPRINKLERS**

1 does the  
work of 5!



55C—FULL  
CIRCLE HEAD

**395** ea.  
list price

**MORE VALUE FEATURES**

**AT LOWEST COST**

- Safe, flush installation. (Rubber caps optional.)
- Max. efficiency at low pressures (25 p.s.i.)
- Easily installed. Minimum of maintenance.
- Low angle of discharge (3-ft. max.)
- Even distribution of gentle rain-like drops. No mist or blow away.

**AT LAST!  
PARKWAY AND  
EDGE PROBLEM  
SOLVED**

51C Rain Jet covers area 5-ft. wide and 40-ft. long. No mist or fog. Ideal for parkways and between buildings.

All Rain Jet heads  
precision-built for years of rugged use.

WRITE FOR FULL PARTICULARS

**RAIN JET CORP.**

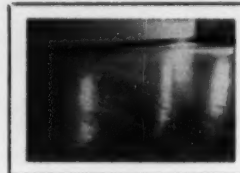
3087 N. California St.  
Burbank, California

SE-334

## WATERLOX—

**Heavy Duty Gym Finish**

A PREMIUM TUNG OIL PRODUCT



A gym finished with Waterlox

**WATERLOX**

Heavy Duty Gym Finish  
Meets Government  
Specifications—  
APPROVED BY  
Maple Flooring  
Manufacturers Assoc.

Rubber burns do not make a lasting impression on WATERLOX Heavy Duty Gym Finish, these blemishes easily removed.

It's TOUGH!

It's LONG-LASTING!

It's BEAUTIFUL!

**Its Performance—UNEXCELLED!**

**WRITE FOR FREE SAMPLE**

WATERLOX Div., Empire Varnish Co.

2636 East 76 St. Cleveland 4, Ohio

Please send **FREE** pint can of WATERLOX

NAME \_\_\_\_\_ Title \_\_\_\_\_

St. \_\_\_\_\_ City \_\_\_\_\_

Please attach to school letter-head

In lessons, lectures and literature it's the presentation that counts!

HALVERSON

## "Visi-Rack"

Literature Display  
with Plexiglas facing

- Shows full cover of every pamphlet
- Won't warp crack or discolor
- Clean easily like glass
- Wall or floor models
- Ideal for School rooms, Library, Foyer, Club-Assembly Rooms, etc.

Literature gets more attention . . . better circulation . . . when displayed in this handsome, inviting "Visi-Rack". Six easy sliding adjustable separators in each tier provide individual tilt back pockets. Attractive, gray enamel finish harmonizes with all school room, office or library interiors. Sturdy welded-steel construction assures many years of use.

Model 48 Visi-Rack  
(without base) 27 1/2" x 15" x 36" high **\$57.50**

Roomy compartment base 19" high, has shelf, lock, 4 ball bearing casters. **\$30.00**

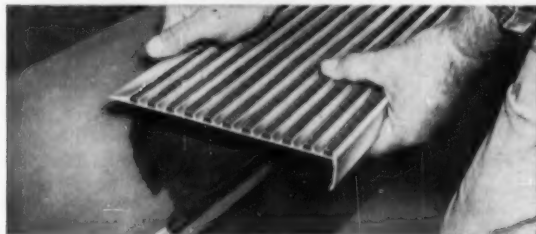


### HALVERSON SPECIALTY SALES

1221 W. Chestnut St. Chicago 22, Illinois

Subsidiary of MIM-E-D STENCIL FILES COMPANY

## MAKE DANGEROUS STAIRS SAFE PERMANENTLY THIS EASY WAY!



- In a few hours you can change dangerous, worn, slippery stairs into safe, beautiful new stairways. Superimpose **LIFETIME ALUMINUM STAIR-MASTER SAFETY TREADS**. Ends costly maintenance. Base of non-corrosive, indestructible architectural aluminum. Safety ribs—containing diamond-hard abrasive grit—provide anti-slip protection . . . sharply reducing stairway accidents.

### FREE

New bulletin shows how to make worn, treacherous stairs safe and beautiful and how to end stair maintenance.

GET FULL  
DETAILS

### WOOSTER PRODUCTS, INC.

Spruce St., Wooster, Ohio

Please send new bulletin on making stairs safe and beautiful

Name .....  
School .....  
Address .....  
City ..... State .....

Step Ahead with **LIFETIME WOOSTER Safety Treads**

## CUT COSTS!



## Hand Dryers

(formerly "NATIONAL" Dryers)

dry as fast as towels—at  
a fraction of the cost

It's the most widely used electric hand dryer—all over the world. WORLD dryer fame has jumped the oceans! Hence it's been renamed, "WORLD"... (Ask for list of famous users.)

WORLD Hand Dryers save an average of \$600 per year per dryer—often lots more! No more costly towels; no more toilets clogged with discards; no more buying, renting or storage. Instead, clean, bright washrooms—at lowest cost!... **Install WORLD Hand Dryers!**

The Dryer Proved Best by U. S. Government Test

**MAIL THIS COUPON TODAY!**



**WORLD DRYER CORPORATION**  
(Formerly "NATIONAL" Dryer)  
616-22 W. Adams St., Chicago 6, Ill.

Gentlemen: Without obligation send me copies of letters from users, also folder of facts including cost-saving figures and full details on your **FREE TRIAL** offer.

My name .....  
Firm name .....  
Street .....  
City ..... State .....

## Index to Advertisers

AS&U American City Bureau .....	36
AS&U American Desk Mfg. Co. ....	4
American Dispenser Co. ....	167
AS&U American Floor Surfacing Machine Co., The .....	125
AS&U American Playground Device Co. ....	163
American School And University ....	129
AS&U American Seating Co. ....	35
American Standard Mfg. Co. ....	157
Arco Co., The .....	153
AS&U Arlington Seating Co. ....	118

Baker-Ross, Inc. ....	106
Beckley-Cardy Co. ....	121
Bell & Howell Co. ....	101
Beseler Co., Charles .....	122
Bil-Jax, Inc. ....	159
Bobrick Mfg. Co. ....	116
Bolta Products, Div. of The .....	137
General Tire & Rubber Co. ....	137
Bradley Washfountain Co. ....	151
Breuer Electric Mfg. Co. ....	18
Brown Co. ....	36
Burlin And Co. ....	123
AS&U Brunswick-Balke-Collender Co., The .....	112, 113

AS&U Califone Corp. ....	15
Chicago Hardware Foundry Co., The .....	109
Chicago Molded Products Corp. ....	37
Church Mfg. Co., C. F. ....	102
Churchill Mfg. Co. ....	99
AS&U Claridge Products & Equipment, Inc. ....	147
AS&U Claw And Sons, James B. ....	152
Colonial Engineering Co., Inc. ....	164
AS&U Corbin Wood Products Div., American Hardware Corp. ....	165

AS&U Diebold, Inc. ....	111
Dodge Truck, Div. of Chrysler Corp. ....	26
AS&U Dudley Lock Corp. ....	98
Duke Mfg. Co. ....	139
Du Pont de Nemours & Co., Inc., E. I., Fabri's Div. ....	103
Du Pont de Nemours & Co., Inc., E. I., Finishes Div. ....	23
Duro-Test Corp. ....	115

Eastman Kodak Co. ....	12
Economy Engineering Co. ....	165
AS&U Empire Varnish Co., Waterlox Div. ....	172
E-Z Fold, Inc. ....	114

Finnell System, Inc. ....	142
Ford Motor Co. ....	138
AS&U Formica Co., The .....	2
Fort Howard Paper Co. ....	6

Garland Co. ....	165
Geopres Wringer, Inc. ....	124
AS&U General Electric, Textolite Chemical Div. ....	171
General Motors Corp., Chevrolet Motor Div. ....	8
Glover Mfg. Co. ....	104
Gougler Keyless Lock Co., C. L. ....	161
AS&U Griggs Equipment Co. ....	95
AS&U Grogg Bros. Mfg. Co. ....	169

Haag Machine Co. ....	157
AS&U Haldeman-Homme Mfg. Co. ....	105
Halverson Specialty Sales Co. ....	173
Hamilton Mfg. Co. ....	166
Hampden Specialty Products, Inc. ....	159
Haws Drinking Faucet Co. ....	162
AS&U Hillyard Chemical Co. ....	115
AS&U Horn Bros., The Brunswick-Balke-Collender Co. ....	145
AS&U Huntington Laboratories, Inc. ....	109
AS&U Hussey Mfg. Co., Inc. ....	123

Illuminating Engineering Co. ....	144
-----------------------------------	-----

AS&U Jennison-Wright Corp. ....	25
AS&U Johns-Manville .....	27
AS&U Johnson Service Co. ....	117

AS&U Kent Co., Inc., The .....	167
AS&U Keyes Fibre Co. ....	29
AS&U Kuehne Mfg. Co. ....	149

Leavitt Products Co. ....	172
AS&U Libbey-Owens-Ford Glass Co. ....	96, 97
AS&U Loxit Systems .....	171
AS&U Lyon Metal Products, Inc. ....	26

AS&U Master Lock Co. ....	157
Mastic Tile Corp. of America .....	106
AS&U Medart Products, Inc., Fred .....	132
AS&U Midwest Folding Products .....	156
Mississippi Glass Co. ....	110
AS&U Mitchell Mfg. Co. ....	146
AS&U Moduwall, Inc. ....	100
Monroe Calculating Machine Co., Inc. ....	30
AS&U Multi-Clean Products, Inc. ....	107

AS&U Naden & Sons Electric Scoreboard Co. ....	163
AS&U National Lock Co. ....	159
AS&U National School Furniture Co. ....	39
AS&U Nesbitt, Inc., John J. ....	32, 33
Nissen Trampoline Co. ....	171
AS&U Nutting Truck & Caster Co. ....	167

Page Fence Div., American Chain & Cable Co., Inc. ....	126
Peck And Harvey .....	124
Penco Products Div., Alan Wood Steel Co. ....	13
Photo Materials .....	116
AS&U Pittsburgh Plate Glass Co. ....	16, 17
Plastics Mfg. Co. ....	135
AS&U Playtime Equipment Corp. ....	127
AS&U Powers Regulator Co., The .....	24
Pratt And Lambert, Inc. ....	160
AS&U Presto Recording Corp. ....	114
Proton Plastics Div., Pro-phy-lac-tic Brush Co. ....	140

Rain-Jet Corp. ....	172
Rauland-Borg Corp. ....	169
AS&U Recreation Equipment Corp. ....	15
AS&U Rowles Co., E. W. A. ....	150
Royal Typewriter Co. ....	34

AS&U Safway Steel Products, Inc. ....	128
Sani-Mist, Inc. ....	104
AS&U Sanymetal Products Co., Inc., The .....	120
AS&U Schieber Sales Co. ....	40
AS&U Seat-Eat, Inc. ....	10
Semco Sales .....	161
Sexaver Mfg. Co., Inc., J. A. ....	98
Shure Mfg. Corp. ....	168
Snyder Tank Corp. ....	126
Southern Coatings & Chemical Co. ....	100
AS&U Spencer Turbine Co. ....	158
Sperti-Faraday, Inc. ....	127
Standard Electric Time Co. ....	14
Stromberg-Carlson Co. ....	161
Sylvania Electric Products, Inc. ....	176

Tremco Mfg. Co., The .....	154
AS&U Triumph Mfg. Co., The .....	140

AS&U Underwood Corp. ....	131
AS&U U. S. Plywood Corp. ....	141
U. S. Steel Corp., Agricultural Extension Section .....	170
AS&U Universal Bleacher Co. ....	31
AS&U Universal Industries .....	169
Universal Mfg. Corp. ....	171

Verd-A-Ray Corp. ....	133
Vestal, Inc. ....	148
Victor Animatograph Corp. ....	116

Wayne Works, Inc. ....	155
Wells Lumber Co., J. W. ....	106
White Mop Wringer Co. ....	163
AS&U Wooster Products, Inc. ....	173
World Dryer Corp. ....	173

## LOOK IT UP in AS&U



The symbol "AS&U" before the name of an advertiser in this Index means that he has presented in AMERICAN SCHOOL AND UNIVERSITY a condensed or comprehensive catalog of his products for school use. A copy of this 1200-page volume is probably in the central administrative office of your schools.

When you want product information quickly, look it up in AS&U.



**AMERICAN SCHOOL PUBLISHING CORP.**  
470 Fourth Ave., New York 16, N. Y.

THE SCHOOL EXECUTIVE

# G-E Textolite Desk Tops

**REDUCE "CLASSROOM EYESTRAIN"\* UP TO 58.5%!**

\* Based on extensive tests made by General Electric lighting engineers, G-E Textolite desk patterns were found to reduce up to 58.5% eyestrain caused by improper light reflectance.

  
**Textolite**®  
 PLASTIC SURFACING

**So easy on the eyes!** There's a big difference when you specify G-E Textolite plastic surfacing for desk tops! That's because Textolite desk patterns have a "pressed-in" satin finish that cuts harsh reflections, reduces contrasts between desk tops and work material, conforms with the "American Standard Practice for School Lighting."

**So practical—throughout the school!** Versatile General Electric Textolite surfaces make old desk tops look like new . . . modernize laboratory counters, cabinets and vertical wall surfaces, too! And for easy maintenance, Textolite resists ugly scratches and ink stains . . . wipes clean in seconds with a damp cloth.

**So good to look at!** G-E Textolite plastic surfacing is available in special DESK patterns that have the look of rich, inlaid leather—in tan, gray or green; authentically styled WOOD-GRAINS in a choice of 14 popular designs—and special school linens in 11 colors.

*Throughout your school, you'll find long-wearing, good-looking Textolite patterns ideal for making school days happy, colorful days.*

*Progress Is Our Most Important Product*

**GENERAL  ELECTRIC**



General Electric Company, Dept. SE6-6  
 P. O. Box 5911, Cleveland 1, Ohio

Please send more information and full-color pattern sheet showing Textolite® plastic surfacing patterns for schools.

Name \_\_\_\_\_

School \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

# INTRODUCING...

## SYLVANIA'S NEW MOHAWK SERIES



**Sylvania Mohawk Series.** Available in 2 widths, 2 lengths, 4 types of shielding. (Above) *The Super-Chief*, 23 $\frac{3}{4}$ " wide; 8-foot-unit with Plastic Louvers shown.

**...surface-mounted shallow fixtures  
for today's low ceilings**



Here's a new custom approach to the lighting design problem: the Sylvania *MOHAWK* Fixture Series.

The Mohawk is the most complete fixture line of its type today. It offers you 24 different stylings. This unusual flexibility gives you complete control of the lighting plan. You can mount fixtures individually, in continuous rows, or in your own original pattern. You have a choice of widths, lengths, and number of lamps, as well as four different types of shielding to create the mood you wish.

More than this, the Mohawk is one of the shallowest commercial fixtures available—no more than 3 $\frac{3}{4}$ " from top to bottom. Yet it maintains a high illumination efficiency; delivers a soft, diffused light. In modern low-ceiling rooms, you can now surface-mount attractive and efficient lighting.

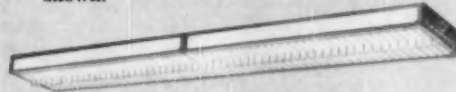
This new fixture series contains many designed-in installation and maintenance features. The Sylvania lighting specialist in your area will be glad to talk over and demonstrate this new trend in lighting for schools, offices and stores.



**The Chief**, 13 $\frac{3}{8}$ " wide. 8-foot unit with Corning #70 Low-Brightness Lens shown.



**Dished Contour Plastic.** Original new shielding design. *Super-Chief* version shown.



**Metal Louvers.** Available in 13 $\frac{3}{8}$ " width units only.

SEND COUPON FOR COMPLETE  
INFORMATIVE BOOKLET



# SYLVANIA®

... fastest growing name in sight

LIGHTING • RADIO • ELECTRONICS  
TELEVISION • ATOMIC ENERGY

Sylvania Electric Products Inc., Dept. F 11  
Lighting Division—Fixtures  
One 48th Street, Wheeling, West Virginia

- ☐ Please send me your informative folder on Sylvania's new Mohawk Series.  
☐ Have a Sylvania lighting specialist call on me.

Name \_\_\_\_\_ Title \_\_\_\_\_

Firm \_\_\_\_\_ Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_